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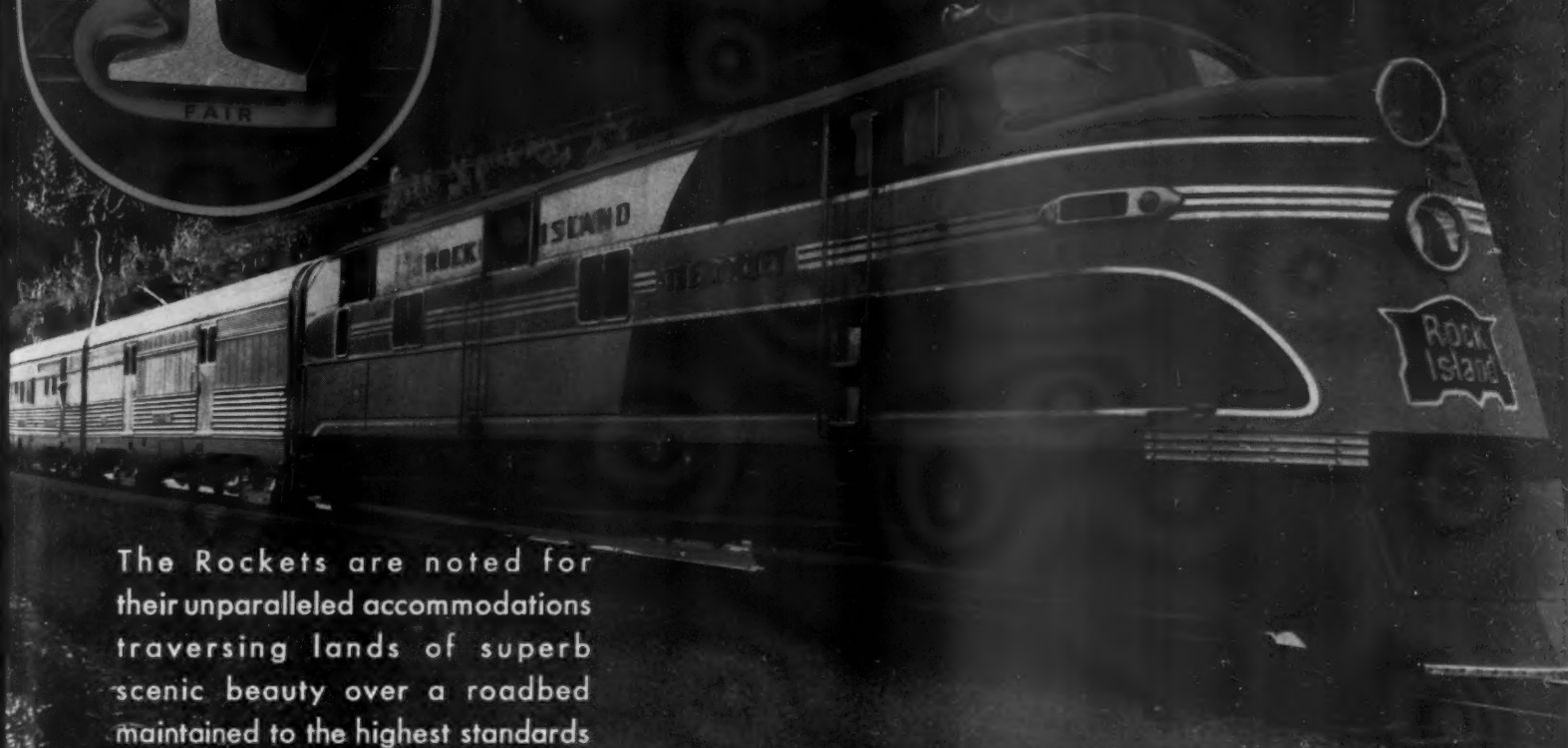
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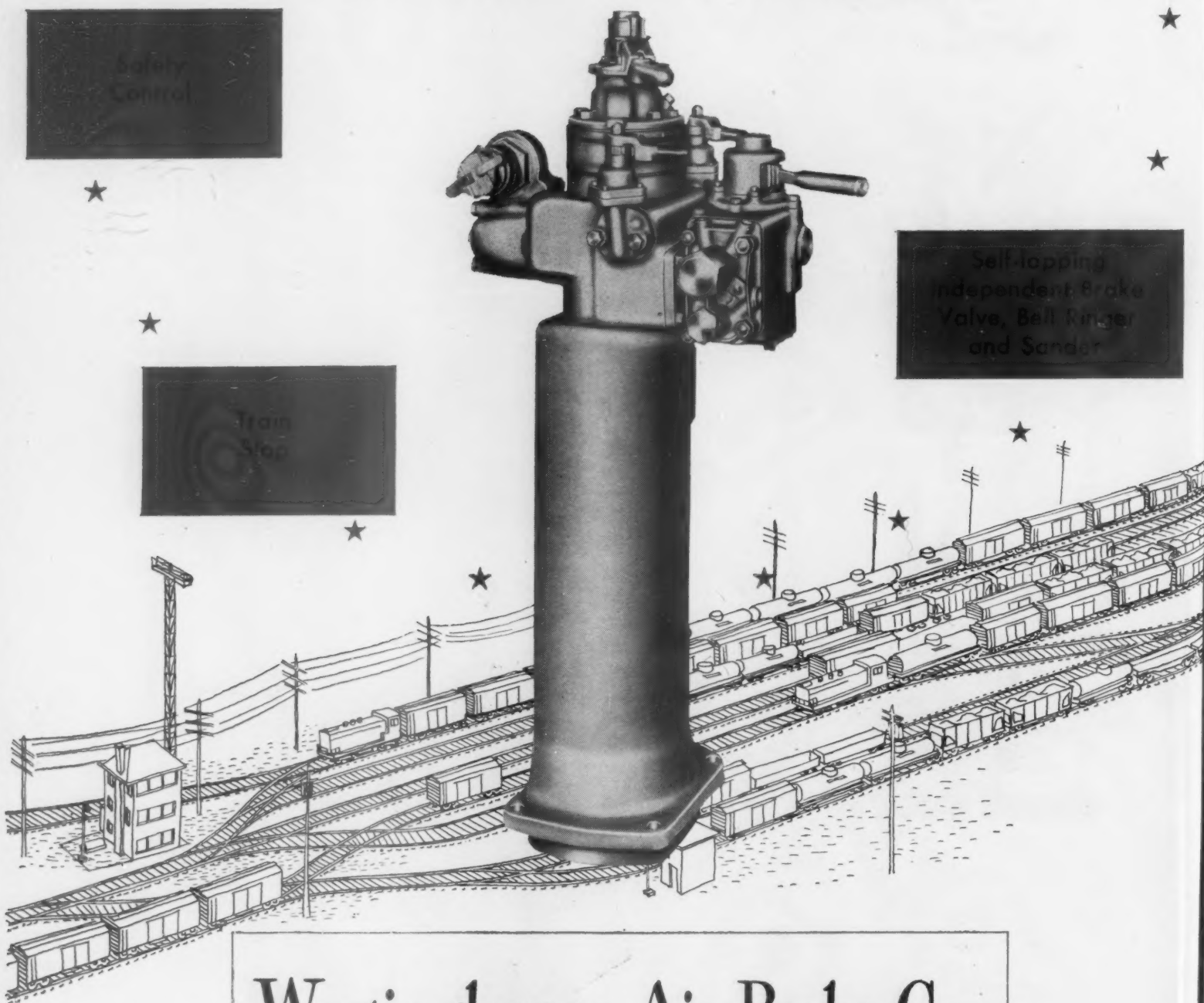
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Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price, \$3.00 a year to the railroad industry in U. S., U. S. possessions and Canada, payable in advance and postage free. Subscription price to the railroad industry elsewhere in the Western Hemisphere, \$10.00 a year; in other countries, \$15.00 a year. Two-year subscriptions double the one-year rate. Single copies 50¢, except special issues \$1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Portland 5, Ore.: Terminal Sales Building—Los Angeles 17: 816 West Fifth Street—San Francisco 4: 1204 Russ Building—Dallas 4: 2909 Maple Avenue.

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Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

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Railway Signaling & Communications Car Builders' Cyclopedias Locomotive Cyclopedias
Railway Engineering & Maintenance Cyclopedias American Builder
Marine Engineering & Shipping Review Marine Catalog & Buyers' Directory
Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.



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WEEK AT A GLANCE

THE BUYERS MEET: Early next week, June 4-6, the Purchases & Stores Division of the A.A.R. holds its annual convention at Chicago, with a full docket of 18 committee reports and four non-member speakers. The complete program for all scheduled sessions is given on page 22, followed immediately by several articles of special interest to railway purchasing and stores officers—on page 23, a discussion by the New York Central's W. H. Ruskaup, Jr., of material shortages and controls and their effect on railroads; on page 25, a pictorial treatment of the Atlantic Coast Line's program for reclamation of diesel parts; and, on pages 27 through 30, brief discussions of new and improved products which the manufacturers hope will soon make their appearance on railroad buying orders.

ALLOCATION TROUBLES: It looks now as though third-quarter steel allocations might be cut to a level permitting production of only 7,600 cars a month, instead of 10,000—but final figures may show "some improvement." The locomotive program for the same third quarter has been set at the low level of 250, amid charges of "favoritism" to the builder receiving the bulk of the allocations. Such charges have been hotly denied by the builder involved. The charges and their denial are reported in the news pages, as are the latest details on both car and locomotive steel allocations.

MORE ABOUT SUPERINTENDENTS: This issue's leading editorial (page 19) is a follow-up of those in our March 26 and April 23 issues; it is, in other words, another discussion of the selection and training of those key men in any railroad organization—division superintendents. It is based largely on comments and suggestions elicited by the two previous editorials on the same subject, which indicate widespread realization and appreciation of the importance of the superintendent's position and of the necessity of picking the right men for the jobs—men who will be right not only now but in the future.

WHAT MAKES "PRECISION TRANSPORTATION" TICK? The Norfolk & Western boasts—and certainly not without reason—that it provides "precision transportation." Some of the many factors that make that kind of transportation possible—such as efficient modern equipment, superbly maintained and intelligently used—were outlined by the N. & W.'s assistant general superintendent of motive power, H. C. Wyatt, at the road's recent Better Service Conference. Mr. Wyatt's talk is abstracted on pages 31-33.

FOR BETTER TIE DISTRIBUTION: Distribution of crossties along a right-of-way is certainly one of the more routine, and, superficially at least, one of the less important jobs involved in running a railroad. The fact, therefore, that at least one major railroad has taken the time and trouble to work out a safer, easier and vastly cheaper way

of doing this routine job is eloquent testimony not only to the railroad industry's meticulous attention to detail but also to its constant search for new ways of saving money. The railroad is the N.Y.C.; the method involves converted container cars with outward swinging side stakes. For further details, see page 42.

THROUGH FREIGHT RADIOS: By combining standard railroad radio equipment with walkie-talkies, the Chicago, Rock Island & Pacific has radio-equipped all its through main-line freights on 1,842 miles of line. Equipment is on order for another 1,284 miles, and similar installations on an additional 829 miles are under consideration. The equipment used, the territory covered and the benefits derived by the railroad—and by its patrons—are all covered in the article on page 34.

HOW TO REGAIN BUSINESS—was by all odds the principal topic of discussion as some 700 members of the Freight Station Section of the A.A.R. met at Chicago May 15-17. A full report of the meeting begins on page 39.

GREAT NORTHERN—GAVIN TO BUDD: As briefly reported last week, John M. Budd has succeeded Frank J. Gavin as president of the Great Northern, and has been succeeded in turn as operating vice-president by Ira G. Pool. The careers of all three men are outlined in the article which starts on page 37, which also summarizes the progress of the G. N. during Mr. Gavin's administration.

NEWS ROUNDUP: April gross 16.2 per cent above last year.—I.C.C. okays increase in parcel post rates, but again denies request for investigation of long-haul trucking.—Nine more roads get amortization certificates.—R. H. Smith and P. B. McGinnis to address accounting officers at New York meeting next month.—May 1 backlog of locomotive orders includes 1,755 locomotives, consisting of 2,363 power units.—L. & N. authorizes construction projects totaling over \$1.4 million.—S. P. orders 5,000 freight cars.—Week's other equipment orders include 1,683 freight cars (some for 1952 delivery) and 24 diesel units, including 16 for the Cotton Belt.—John P. Morris, Santa Fe, heads Western Railway Club.—Program for superintendents' meeting.—Tie-up with social security held costly to railroad retirement.—I.C.C. again postpones new auto rates.—Illinois Central wins National Safety Council award for lowest employee casualty rate among largest railroads; other winners also reported.—Eight killed, 63 injured in wreck at Bryn Mawr, Pa.—Railroad presidents ask favorable I.C.C. action in Ex Parte 175 rate increase. Incidentally, it may not be news, but we understand the Santa Fe is experimenting with rail transportation of highway truck trailers between Kansas City and Wichita, using trailers of its highway subsidiary.



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method of welding is the best and most durable
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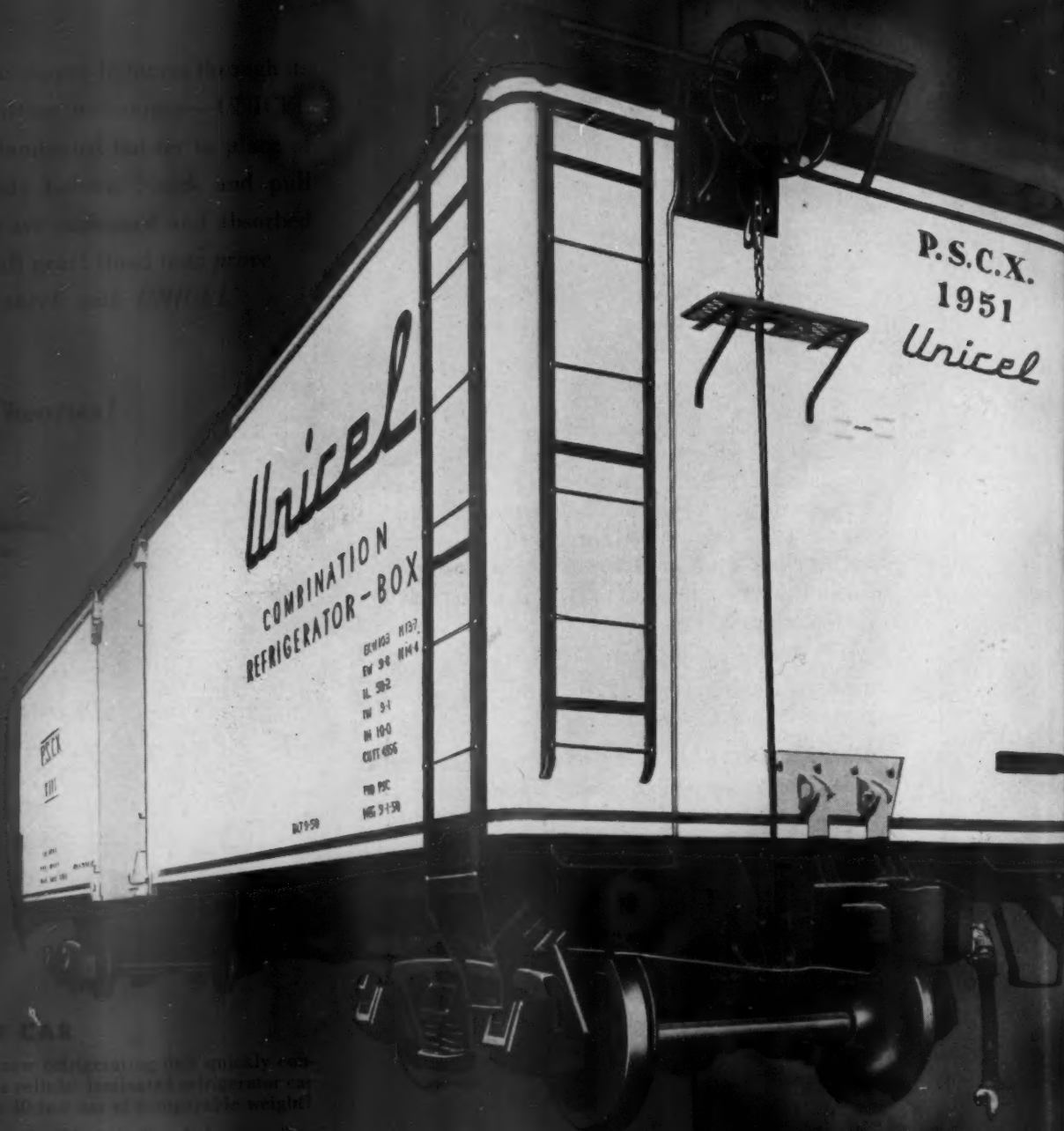
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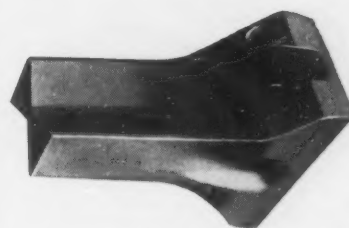
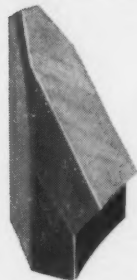
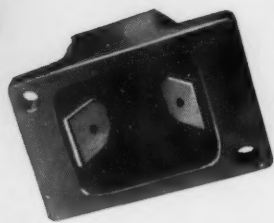
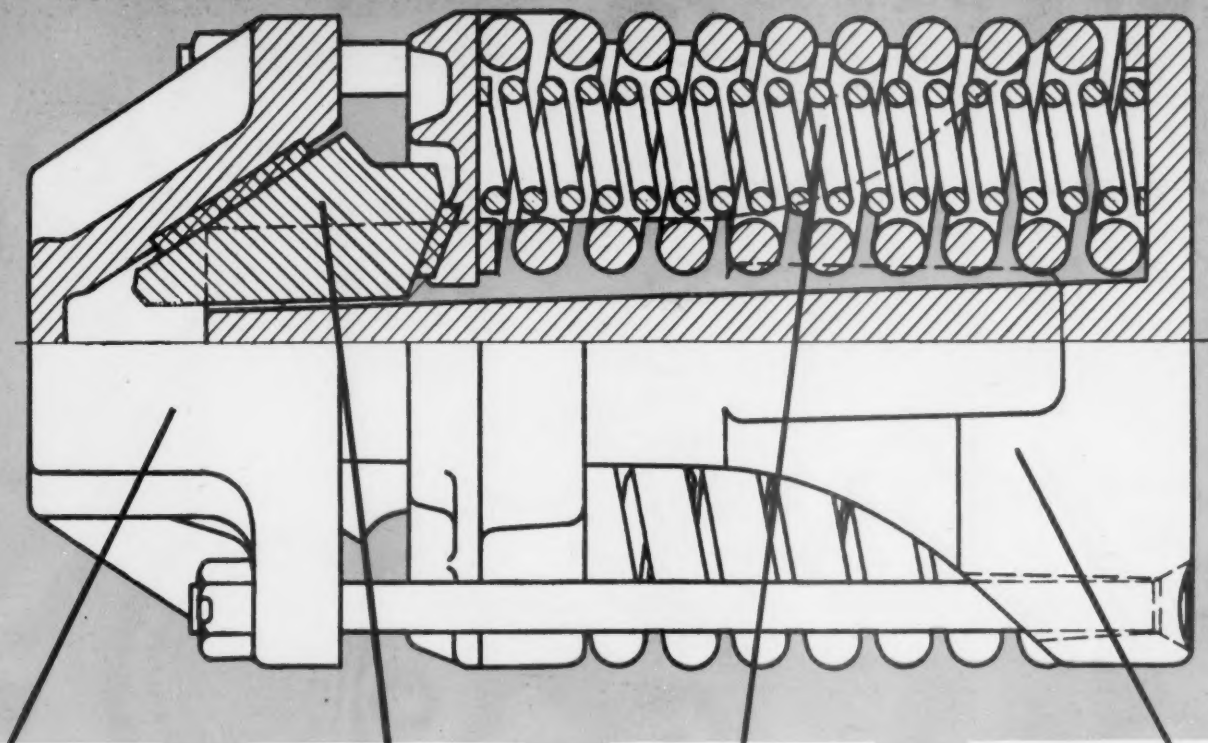
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The report points out that in both the five and twelve year tests "externally these gears appeared in good shape... externally there was no detectable wear... the wedging surfaces were all nicely polished... friction surfaces all had

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And the report shows that after twelve years of service, the average capacity of the gears tested was still 37% above the AAR minimum of 18,000 foot-pounds required of new gears.

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Upper photo: Conductor in caboose using "Handie-Talkie" to call the head end.

Center: Call being received at head end.

Bottom: Caboose unit can also be carried for train inspection.

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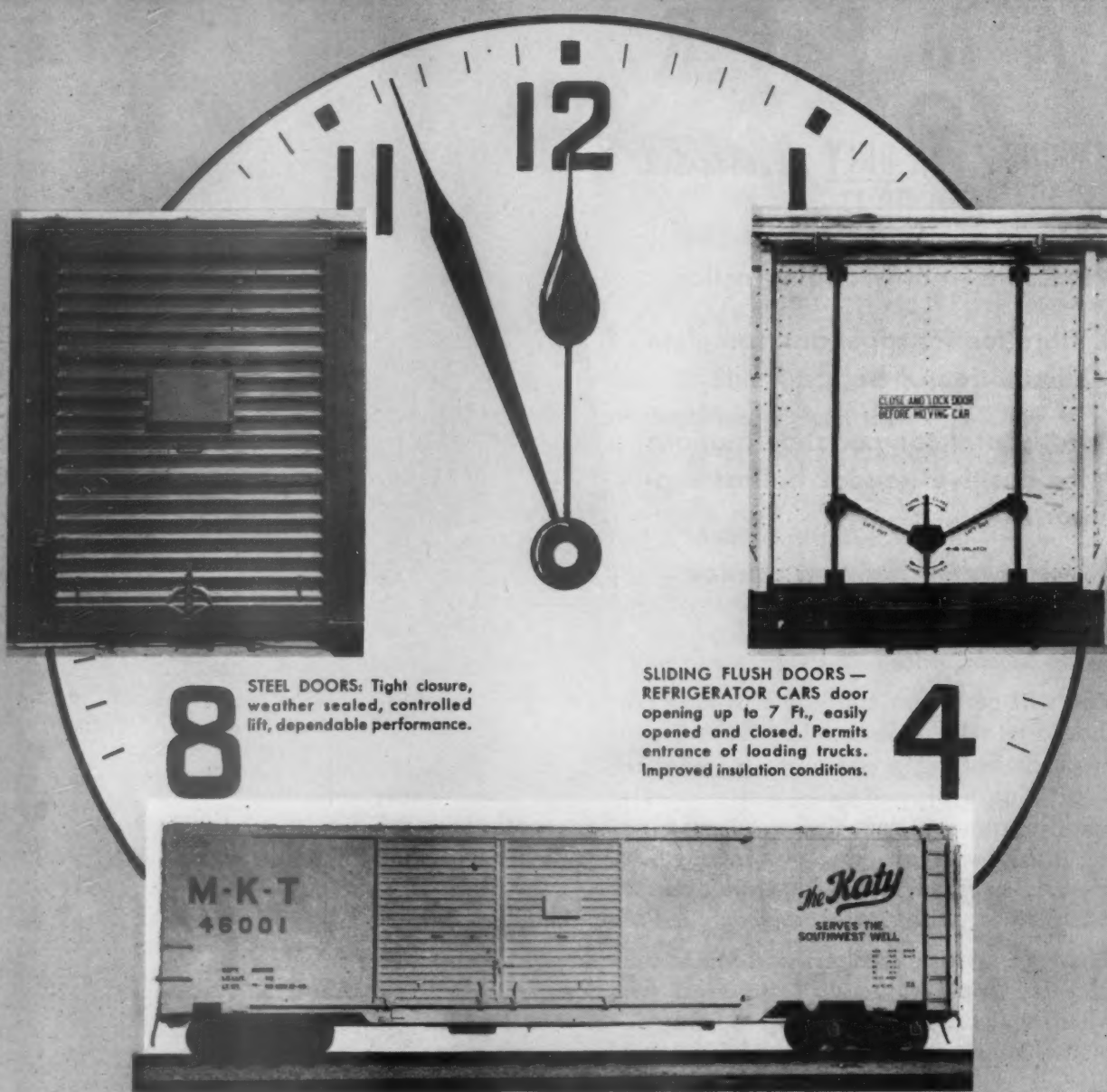
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MORE ABOUT THE SUPERINTENDENTS

There is plenty of appreciation on the part of a lot of railroad managements of the key importance to them of their superintendents, and hence the desirability of selecting the right men for these positions and giving them adequate training for their duties. The response of readers to the discussion of this subject in this space (March 26 and April 23 issues) is conclusive evidence of wide-spread interest in it. What are the methods by which the right men with the proper training and experience can be made available for these jobs? Our readers have made some pointed suggestions, a few of which are reported herewith.

Assuring the "Management Viewpoint"

One of the problems which arises is that of assuring the predominance of relatively young men in these positions—for the simple reason that the job, especially on a busy division, is one requiring great physical stamina and mental energy, not an ideal assignment for a man whose vital processes are definitely past their prime. It is recognized, of course, that some men are younger in the sixties than others are whose ages by the calendar are much less. What, however, of the superintendent who is fully adequate to his job at the start, but does not develop sufficient capacity to warrant further promotion—and who, hence, grows old in charge of a division? Demotion for such men as they begin to age is scarcely a solution—alike because of the heartlessness of such a policy; and because it can scarcely be expected to inculcate the "management viewpoint" in

superintendents when they know that "degradation" (in the literal meaning of the term) awaits them as soon as some arbitrary age, say 60 years, is reached.

One important railroad has resolved this dilemma by relieving its older superintendents of their more active duties, while retaining them on the payroll without alteration in title or compensation, using them at headquarters on staff assignments. Most railroads have more such staff work which needs doing than they have competent personnel to whom to entrust it. The man who has reached the higher-age brackets while running the affairs of a division usually has the knowledge and wisdom born of experience in sufficient quantity to assure his competence for most staff assignments. By giving aging superintendents such less exacting duties, this road is assuring itself of maximum vigor on the part of superintendents actively on the job—while in no sense penalizing the older men for a situation for which they are in no way to blame. It scarcely needs to be added that morale among superintendents on this particular road is high—no lack of the "management viewpoint" here!

Youth and Training

Most managers who have made their views available to this paper agree on at least two objectives regarding their corps of superintendents, viz., (1) keeping the average age of incumbents relatively low and (2) increasing the ratio of college-trained men in these positions. No railroad manager from whom we have heard

favors placing an arbitrary limit on a superintendent's age; and none would limit the assignment to men with academic training. The conscious effort to reduce the average age and to increase the admixture of academic backgrounds among appointees arises solely from the likelihood that—if these two goals are not consciously sought—the result is only too likely to be a past-prime average age, with no academic admixture at all. Here is how one large railroad—which we will designate as Railroad X—has increased the youth and educational background of its superintendents in the past ten years, as compared to our compilation of age and education in these jobs for the railroads as a whole (tabulated in our April 23 issue):

		1940		1949	
		All Railroads	Railroad "X"	All Railroads	Railroad "X"
Per cent	Age 30-39	2.6	15.8	4.5	26.3
" "	" 40-49	19.7	36.8	23.5	36.8
" "	" 50-59	51.3	31.6	39.8	31.6
" "	" 60-69	24.4	15.8	30.6	5.3
" "	" over 70	2.0	0.0	1.6	0.0
Arithmetic Mean Age		54.8	48.7	52.6	46.2
Per cent College Educated		25.0	36.8	25.0	47.4

Here, then, we have a railroad which has almost twice the academic ingredient in its superintendencies that is possessed by the railroads as a whole—and has only a negligible ratio over 60 years of age, with more than two-thirds of the corps under 50. And yet even this company, with its relatively heavy emphasis on college training, has by no means closed the door to advancement to energetic men from the ranks—from whose number it still draws more than half its corps. That this company's system produces desirable results is proved objectively (that is, in the opinion of other managements) by the number of other railroads which have "raided" it for likely candidates for important official positions.

This particular company, in its choice of academic backgrounds for men to be promoted to supervisory positions in the operating department (i.e., the force from which superintendents are directly recruited) appears to show some preference for civil engineers. Still another railroad, equally interested in the careful selection and training of supervisory personnel, spreads its supervisory procurement program rather widely—and seems to have little preference in selection as between potential candidates—whether they are trained as engineers or in purely academic subjects, or are wholly lacking in post-high-school education. This road emphasizes, in its initial selection, (1) a high "I.Q." and (2) ability to get along with people. It is not contended that a high "I.Q.," alone, equips a man for supervisory responsibilities—but without such a rating he will be a slow learner and it does not pay to waste time in training him.

For a Broader Background?

Possibly our information is incomplete, but we have no evidence that any railroad is giving potential superintendents a period of duty in the public relations, personnel or traffic departments as a regular routine.

Considering the nature of the superintendent's duties, impinging on all these departments, some indoctrination and experience in their bailiwicks would not appear inappropriate. Indeed, one high traffic officer believes that the barrier between the traffic and operating departments ought to be broken down completely. His argument, in substance, is as follows:

"The man who solicits traffic for a truck line has usually been a truck driver. He knows the shipper's platform and his shipping clerk, and how his product is handled in the plant. Hence he knows how truck transportation will fit into the picture. Our railroad traffic solicitors do not have this down-to-earth information. Our people who do have this information are our switchmen, yardmasters and trainmasters. We do not recruit our traffic representatives from the operating department. I think we should begin to do so."

There is no magic formula to be discovered, either in the selection or in the training of superintendents or other important supervisory officers. But intensified attention to the problem—and free exchange of information among managements as to the success or failure of various programs and approaches—should give increasingly satisfactory results. As one chief executive testifies: "Because of our *certainty* that we have capable and widely experienced men in our supervisory jobs, we are able with safety to give more autonomy to a yardmaster than some roads accord to a superintendent. That is the way we give the immediate flexibility in service which is so important to our shippers."

Considering the immensely greater complexity of running a regulated industry like the railroads, compared to that of other large businesses that are unregulated, scarcely any degree of care and intensity in the selection and training of railway supervisory forces would be out of place. And the superintendent is the key to the situation—not only of present-day efficiency, but as the group from which, most likely, top management will continue to be drawn, in the future as in the past. If there are aspects of this situation that we have neglected to consider, please remind us and we will be glad to remedy the deficiency. There is no more important single question than this.

"LAYING A GHOST AT WASHINGTON"

There is a popular style of contemporary art which amuses the public with landscapes peopled with bizarre and impossible figures, born of nightmarish imagination. Such fantasies as a watch wearing a pair of pants — or a luscious feminine torso with a pitchfork serving as a head — these are the things in which this school specializes. An exponent of this species of portraiture might be able to depict with recognizable realism the rate-advance case now in progress before the Interstate Com-

merce Commission — a situation wherein actuality is more than a match for credulity.

Here we have the spectacle of the railroads — an industry as essential to the nation as blood is to the human body—pleading for permission to charge enough for their product barely to meet necessary expense, a natural right which all other producers exercise without a by-your-leave to anybody. At these I.C.C. proceedings there are always on hand some well-upholstered opponents to insist that the emaciated and indispensable servitor be denied a sustaining diet — but how they holler if his weakness interferes with the dependability of his service!

If all of us hadn't grown up in the middle of these Alice-in-Wonderland antics, we'd find it easier to sense how weird a show it is. Railroad regulation was instituted to prevent the rich railroads from burdening their defenseless patrons with monopolistic extortions — a danger which has long been present, if at all, only in its exact reverse, namely that opulent patrons might now fare too well at the expense of impoverished carriers.

Proceedings before the I.C.C. to exorcise the peril of the long-deceased "railroad monopoly" fall into much the same category as the ritual at the opening of the British Parliament, when lantern-bearing "beefeaters" search the premises for Guy Fawkes and his gunpowder bombs. The only difference is that the search for Fawkes isn't taken seriously. Nobody really expects to find Guy lurking within the precincts of the House of Commons. Nor do the Parliamentary wardens require the blood of a living substitute, as do our literal minded Yankee ghost-layers, when they set out to do mayhem to the shade of the "railroad monopoly."

For pleading their cause the railroads have a battery of able lawyers, economists and rate men. Actually, isn't it more like a job for Gilbert and Sullivan?

BIG BUSINESS

Many persons connected with the railroad industry are inclined to look upon the volume of new equipment and the material purchased for maintenance of equipment in other industries as of greater magnitude than in the railroad industry, itself. As a matter of fact, the railroad business represents operations running into hundreds of thousands of units and hundreds of millions of dollars both in the matter of investment and in annual expenditures for the continued maintenance of the equipment and facilities used to keep the railroads running.

Take the automobile industry for example. In 49 years of its history, it has produced 102 million passenger cars, motor trucks and buses having a wholesale value of \$79 billion. The wholesale value of the actual production of new motor vehicles will vary, in a good year, from \$3 billion to \$6¾ billion. The market for replacement parts and accessories alone in the automotive industry runs \$2½ billion in a year like 1948.

We don't know whether this \$2½ billion worth of replacement parts takes care of the needs of all of the 41 million automotive vehicles that are registered in the United States in a representative year, but two facts are evident: that it represents a vast market and represents the production of hundreds of companies in the automotive supply field besides the builders of passenger cars, trucks and buses.

Just one small segment of the railroad industry alone represents money value that runs into big business. The diesel-electric locomotive, because of the character of that type of equipment and the manner of its production, has been associated by a great many people with the automotive industry. Since 1925, when the first diesel-electric locomotive was operated in the United States, this business has grown to a point where the approximate value of the diesel-electric locomotives in service on the Class I railroads alone is somewhere in the neighborhood of \$2 billion, and it has been estimated that the cost of replacement parts, in the storehouses of the Class I railroads represents, in money value, somewhere from \$75 to \$100 million.

The dollar value of the annual production of diesel-electric locomotive parts is not a matter of record, but, regardless of the fact that up to this time the railroads have secured the greater portion of replacement parts for diesel-electric locomotives from the manufacturers who build the locomotives, it remains that the producers of these parts represent a gradually broadening group of manufacturers who build the multitude of parts and accessories that go into the locomotive. It has been for only a few years that the total annual production of diesel-electric locomotives has represented a substantial number of units or of dollar value; and it is only in the past year or two that the locomotive building capacity of this country has been approached.

The cumulative ownership of diesel-electric locomotives by the railroads has been rapidly growing and has now reached the point where the total horsepower in service on the Class I roads alone represents about three or four times the capacity to build in any one year. In other words, for every horsepower that is built into a new locomotive, there are approximately three or four horsepower in service. It is obvious that the requirements for replacement parts are rapidly building up. The result is that the railroads themselves, to assure a supply and the creation of a competitive market, are looking around in the locomotive field, as in every other field, for unfailing sources of supply in order to be certain of maintaining service.

The diesel-electric locomotive is a small part of the railroad industry but it is rapidly assuming the proportions of big business, and, with the addition of from five to six million horsepower of new units a year, the requirements for parts alone represent a substantial sum. These parts are being secured from a rapidly increasing number of sources whether purchased from the parts departments of the locomotive builders or directly from the manufacturers.

P. & S. Program a Full One



C. B. Neubauer
Chairman



C. E. Woodson
Executive Vice-Chairman

The Grand Ballroom of Chicago's Palmer House will be the scene of activities as the Purchases and Stores Division of the Association of American Railroads holds its 25th annual meeting, Monday, June 4, through Wednesday, June 6. Except for the Monday morning session, all morning meetings will begin at 9:30 a.m., Chicago time. The Monday morning opening will be at 10:00 a.m. All afternoon sessions are scheduled for 2:00 p.m. Eighteen subject committee reports will be presented for the consideration of the members, while four non-members will address the sessions.

PROGRAM

Monday, June 4

Morning Session—10:00 a.m.

Call to order by Chairman C. B. Neubauer, assistant to vice-president, Southern
Invocation

Address by J. H. Aydelott, vice-president, operations and maintenance department, Association of American Railroads

Address by Harry A. DeButts, vice-president, operation, Southern

Address by Chairman C. B. Neubauer

Appointment of Committees. (Resolutions and Memorials)
Action on Minutes of 1950 Annual Meeting

Report of General Committee

Communications

Reports of:

Subject 1—Purchasing and Stores Department Manual—Recommended Rules and Practices; T. S. Edgell (chairman), district storekeeper, Gulf, Mobile & Ohio

Subject 2—Standard Material Classification; J. W. Cockrill (chairman), district storekeeper, Illinois Central

Afternoon Session—2:00 p.m.

Reports of:

Subject 3—Scrap, Handling and Preparation—Classification and Sale; F. F. Forbes (chairman), supervisor scrap and reclamation, Erie

Subject 3A—General Reclamation; F. J. Steinberger (chairman), assistant general purchasing agent, Atchison, Topeka & Santa Fe

Subject 15—Storage and Material Handling Facilities—Capacity Loading and Prompt Handling of Company Material Cars; S. L. Bouque (chairman), assistant general storekeeper, Southern Pacific

Knudson, DeButts, Aydelott and Green of Illinois Institute will address twenty-fifth annual session—18 reports to consider

Subject 8—Shop Manufacturing; A. V. Sorensen (chairman), division storekeeper, Atchison, Topeka & Santa Fe

Subject 9—Fuel—Coal, Fuel Oil and Diesel Fuel Oil; J. J. Bilek (chairman), lumber and fuel buyer, Chicago & North Western

Subject 12—Purchasing Department—Organization and Procedure; W. S. Riach (chairman), assistant general purchasing agent, Atchison, Topeka & Santa Fe

Tuesday, June 5

Morning Session—9:30 a.m.

Address by James K. Knudson, commissioner, Interstate Commerce Commission; administrator, Defense Transport Administration, Washington, D. C.

Reports of:

Subject 13—Stationery and Printing; C. C. Wooten (chairman), stationer, Nashville, Chattanooga & St. Louis

Subject 14—Fire Prevention Safety Practices, Insurance—Purchasing and Stores Department; M. J. Stelzer (chairman), division storekeeper, Erie

Subject 5—Forest Products; T. P. Lynch (chairman), assistant general purchasing agent, New York Central

Subject 16—Simplification and Standardization of Stores Stock; G. H. Flagg (chairman), supervisor of materials, Baltimore & Ohio

Subject 18—Terminal Railway Purchasing and Storekeeping; J. B. Hobbs (chairman), stores inspector, Chicago, Rock Island & Pacific

Afternoon Session—2:00 p.m.

Report of:

Subject 42—Diesel Locomotive Parts—Purchasing and Storekeeping; John Lembach (chairman), purchasing agent, Florida East Coast

Address by Wilson P. Green, chairman, heat power research department, Armour Research Foundation of the Illinois Institute of Technology

Reports of:

Subject 29—Merchandising Surplus Material; E. H. Otto, (chairman), assistant to purchasing agent, Baltimore & Ohio

Subject 34—Maintenance of Way and Construction Materials (including Signal, Telephone and Telegraph)—Purchasing and Storekeeping; J. M. Day (chairman), assistant to general storekeeper, Southern Pacific

Wednesday, June 6

Morning Session—9:30 a.m. to Adjournment

Annual Essay Contest Committee; G. T. Wickstrom (chairman), general purchasing agent, Union Pacific

Reports of:

Subject 37—Stores Department—Organization and Procedure; N. B. Coggins (chairman), general storekeeper, Southern

Subject 40—Loss and Damage Prevention—Salvage and Disposition; W. A. Clem (chairman), purchasing agent, Reading

Reports of:

Resolutions Committee

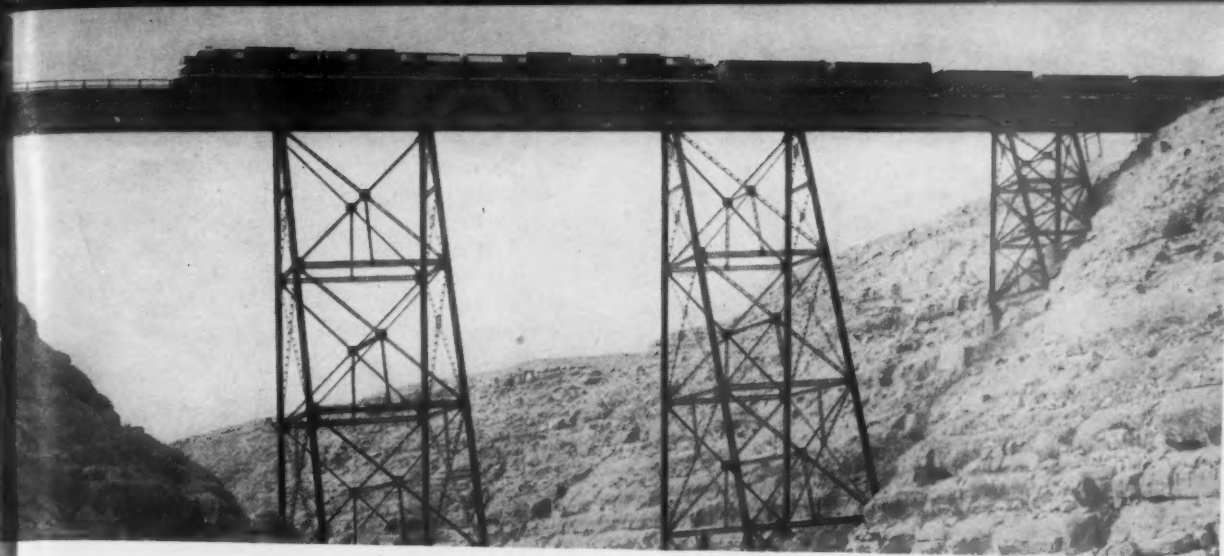
Memorials Committee

Nominating Committee

Election of Officers

Introduction of New Chairman and Vice-Chairman

Adjournment



Steel for maintenance and repair work on bridges and buildings has been very difficult to procure

Material Shortages and Controls and Their Effect on Railroads

By **W. H. RUSKAUP, Jr.**
Assistant General Purchasing Agent
New York Central

The beginning of our present material shortages was the start of the Korean War last summer. Immediately thereafter production for government defense projects and related industries increased, producing shortages of steel, copper, rubber and various alloy metals. Of these "short" items, steel probably is the most important one to a railroad. With the increase in industrial production throughout the country, the demand for freight cars became very heavy, and while steps were being taken to increase new freight car production to 10,000 cars per month, it was equally important that existing freight cars be kept in repair and that necessary steel for these repairs be made available.

President Truman, on September 9, 1950, announced to the press that the Secretary of Commerce would have priority and allocation powers over all short materials and that he would exercise those powers in a manner which would promote adequate supplies and proper distribution.

The National Production Authority (N.P.A.), the organization set up in the Department of Commerce to handle priorities and allocations, released its Regulation 1 on September 18, 1950. This order restricted "excessive" inventories of materials. The next N.P.A. release was its Regulation 2, dated October 3, 1950, explaining the basic rules of the priorities system. This regulation, however, applied only to the Department of Defense and the Atomic Energy Commission, which were authorized to apply D.O. (defense order) ratings to their purchase orders.

October 4, 1950, James K. Knudson, a member of the Interstate Commerce Commission, who had been designated by the President to head the "claimant agency" dealing with allocation of critical material for domestic transportation, announced the establishment of the Defense Transport Administration (D.T.A.) with Mr. Knudson as administrator.

During this period of announcements of priorities

This article is adapted from a paper presented at the May 17 meeting of the New York Railroad Club.

and allocations to come, the Purchases and Stores Division of the Association of American Railroads was busy keeping the railroads informed of these events, as well as in obtaining reports from the carriers of future requirements of steel for freight car repairs and new freight car production. On the basis of carrier reports the P. & S. Division was able to help the N.P.A. set up estimates of overall railroad requirements for these purposes. Incidentally, I would like to compliment that group on the fine work it has done.

It became increasingly difficult, during the fourth quarter of 1950, to place orders for any steel items. Formal requests by N.P.A. then were made in which each railroad was asked to submit requirements for steel for freight car construction and repair during the first quarter of 1951. However, the need for freight cars was so immediate that Mr. Knudson announced on October 19 that 63 per cent of the January 1951 allotment of steel requested by the railroads would be made available for December, 1950. Railroads were instructed that orders for this steel, and also steel required for the first quarter of 1951, carry the following certification:

"It is hereby certified that the material called for in this order is to be used only in connection with the freight car construction and repair program under authority of N.P.A."

M.R.O. (maintenance, repair and operating) material, i.e., material required for other than new capital equipment, was much easier to obtain after this certification arrangement. However, it still was difficult to place orders for bars and steel plate for use during the first quarter of 1951. Approximately 90 per cent of the steel plate tonnage requested by the railroads in the first quarter of 1951 was granted certification by the N.P.A. Considerable juggling was required, however, to get the orders on the steel mills' books, as the mills offered sizes and widths that could not be used.

Requests for freight car M.R.O. material for the second quarter were filed for each month individually instead of for the quarter as a whole. The steel plate request for that period was granted approximately 96 per cent in April, 93 per cent for May and 100 per cent in June. Certification on these orders also was

required. It later developed that instead of certifying the orders for June delivery, a D.O.-38 P rating was applied. This was authorized by the National Production Authority on March 29, 1951.

These requests for freight car steel requirements for first and second quarter needs were made on Form D.T.A.-No. 3, on which we had to show required tonnages of billets, shapes, plates, bars, pipe, sheets, wheels, axles and tubing. The item of steel plate was broken down roughly into three widths: wide plate of 72 in. and over; intermediate plate 48 in. to 72 in. wide; and narrow plate of 48 in. or less. Tonnage requests and allocations were, therefore, broken down separately into these three widths and the N.P.A. divided the allocations among the steel mills having proper rolling facilities. Some difficulty was encountered in actual procurement, however, for narrow or intermediate plate was in some cases rolled on wide mills in multiple widths. From this there developed reports of railroads making over-certification of wide plate and under-certification of narrow plate. It has been said that because of so little wide plate being available, new freight cars and freight cars repaired might have to incorporate in design narrow plate where wide plate normally is used.

Material for freight car construction and repairs is not the only shortage that has been bothering us. However, there were no certifications or priority ratings applied on other than freight car material until issuance of Regulation 2, covering "Basic Rules of the Priority System," and Regulation 4, covering "Maintenance, Repair and Operating Supplies and Minor Capital Additions," both regulations being dated February 27, 1951. Regulation 4 authorized the use of Rating D.O.-97 by N.P.A. to every business enterprise, government agency and institution for M.R.O. material and minor capital improvements. The limit for capital material to which a D.O.-97 could be assigned was not more than \$750. These regulations also contained a restricted list of commodities to which a D.O.-97 rating could not be applied, such as solid fuels, petroleum, ice, mineral aggregates, ores and scrap, to name only a few. Other items were put on the restricted list in an amendment dated April 26. Some of these were chemicals, paints and lacquers, rails and rail accessories, to name the more important ones.

The volume of M.R.O. order purchases under these two N.P.A. orders is governed by a quarterly quota in dollar volume. This quarterly quota is determined by taking one-fourth of the amount spent for M.R.O. in the calendar year 1950. However, due to the increased cost of materials, 1951 over 1950, and the increase in traffic as well, the railroads asked the N.P.A. for an increase over the 1950 M.R.O. dollar volume. This increase was generally granted, and averaged from 25 per cent to 35 per cent, which included material cost increases of from 10 per cent to 15 per cent.

No special priorities or certification were set up for acquiring steel for locomotive, passenger car, bridge and other maintenance and repair until the D.O.-97 rating came into being. Prior to that, extreme difficulty was experienced, especially in placing orders for boiler and firebox steel and boiler tubes. With the beginning of use of the D.O.-97 rating, orders for passenger car and locomotive steel were accepted by the mills with the exception of boiler tubes which continued scarce. This was evidently due to insufficient steel strip being allocated to the boiler tube manufacturers. We are now promised by the Railroad Equipment Division of the N.P.A. that a production directive has been issued to

the various boiler tube manufacturers which allocates to them an increased monthly tonnage of steel, beginning in June and continuing thereafter.

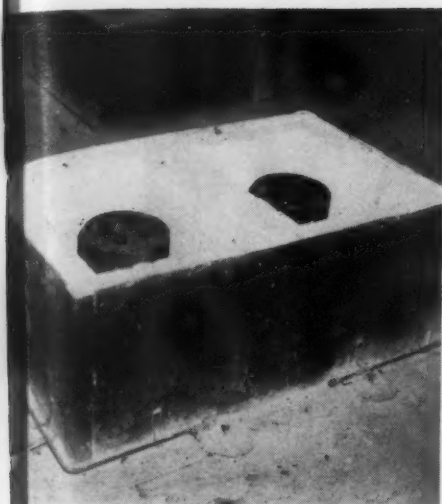
Capital items valued at more than \$750 are running into very long deliveries or are unscheduled altogether. This includes electrical equipment and machine tools, since many of these items are also used for defense and atomic energy projects and are ordered for those purposes on D.O. ratings. Application to the Railroad Equipment Division of N.P.A. to obtain a D.O. rating for these capital items results in a D.O.-45 rating, if granted. We do need further help in obtaining materials in these classifications.

The first "M" order issued by N.P.A. came out in late 1950, with others issued subsequently. The highest number now is M-59. These "M" orders restrict inventories, purchases and uses of critical materials such as rubber, aluminum, copper and various alloy-type metals, to name only a few. The big item in that list which everyone has his eye on is copper, covered by orders M-11 and M-12, and also nickel, covered by order M-14. The importance of copper to the railroads is becoming greater daily, because of the increasing use of diesel-electric locomotives. Electric equipment for diesels has been delivered rather well in the past, on a ninety-day anticipated delivery schedule, but concern is felt as to the future delivery of these parts. One of the diesel builders is asking us now to anticipate 180-day delivery. Other copper products are being watched closely for they also call for very long delivery periods. I refer to such items as wire, cable, electric motors and controls.

All purchasing and stores officers are now particularly concerned about the plan of government controls to start on July 1, the Controlled Materials Plan, called C.M.P. This plan was used in World War II—and proved to be the best way to guarantee that a balanced flow of materials would be available in sufficient quantity—on time. Under the Controlled Materials Plan, the three basic metals—steel, copper and aluminum—are allotted directly to producers on the basis of requirements—submitted in advance—for the manufacture of goods which the government needs for the defense program. Under the present priority system, using Defense Order ratings, materials have been channeled into defense production, but the D.O. system lacks the element of orderly distribution of basic materials. These D.O. orders have been an authorization to draw checks on a bank without anyone knowing the exact bank balance or how many checks are out. Under C.M.P., the National Production Authority will tell producers what the government has to have, and will furnish others with authority to purchase materials from a known supply while mills will have a timetable schedule to carry out the production. The authorization or allotment of steel, copper or aluminum under the Controlled Materials Plan is not a hunting license; it is a cashier's check on a known supply.

Quotas now are being released for third quarter freight car M.R.O. under C.M.P. and these quotas are approximately 66 per cent of the tonnage requested. Of this tonnage, a maximum of 35 per cent can be placed for July delivery and the balance placed for August and September delivery, at the railroads' discretion. To these orders will be applied a rating D.O.-38 P., U.S. Freight Cars, with an authorization number.

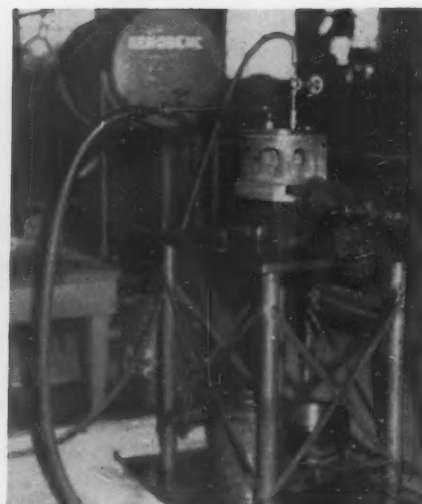
Railroad purchasing people are anticipating in the near future C.M.P. application forms from the N.P.A. covering all M.R.O. material. Also anticipated are special forms covering construction of buildings, facilities and major capital equipment items.



Left—Cylinder heads are magnafluxed for cracks when received. Then the valve seats are ground and heads are counterbored. Before welding they are placed in this charcoal-burning furnace and heated to a temperature of 1,400 deg. F. for about 1½ hr. before they are welded. (Carbon plugs in valve seats keep metal from running to other parts



of the head.) After welding, they are brought back to heat and then packed in asbestos for about five days. Center—After seasoning, heads are machined to standard, ground and faced. Right—Then heads are tested for cracks. The head is filled with kerosene and 110 lb. of air is pumped into it. If there are no leaks the job has been done properly



High Quality Workmanship Aim of A. C. L. DIESEL PARTS RECLAMATION

At its Emerson shops in Rocky Mount, N. C., the Atlantic Coast Line has converted a part of what was formerly the steam locomotive boiler shop into a reclamation plant at which it is reclaiming and repairing diesel locomotive parts as well as other material. (On the Coast Line such activities come under the supervision of the mechanical department, while the purchasing and stores departments, of course, do the accounting for material.) High quality workmanship in the repair and reclamation work is the goal of the Coast Line, rather than impressive statistics, especially in these days when conservation of material is so important.

Among the diesel parts being reclaimed at Rocky Mount are pistons, valves, cylinder heads, injectors, commutator and pinion end housings, and all sorts of gages; in addition to brake beams for both passenger and freight cars and draft gears. Daily reclamation production of reclaimed diesel material at Rocky Mount runs about as follows:

Injectors	12 per day
Commutation end housing	2 per day
Cylinder heads	1 or 2 per day
Pistons	2 per day
Valves	8 per day

Seven men, including a foreman, do the diesel work at Rocky Mount. R. W. Tonning, Jr., is shop superintendent at Emerson, while E. A. Williams is foreman of the reclamation shop.

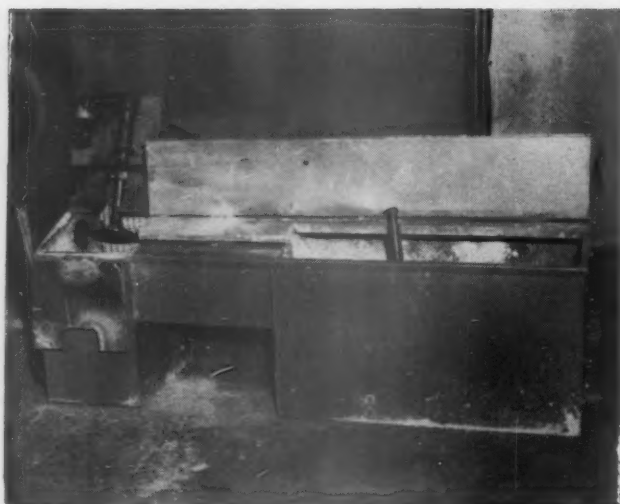
(Additional pictures appear on page 26.)



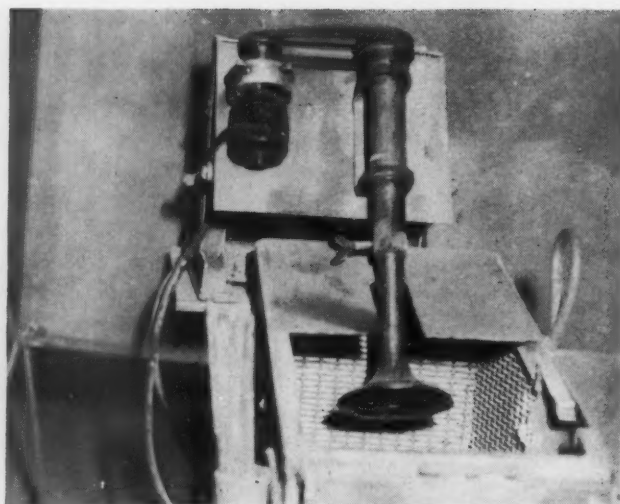
Finished cylinder heads after having been wiped and cleaned



Commutator end housing on the boring mill for machining. Housings are welded up with No. 387 electric welding rod before they are machined



Two views of a jig made by Coast Line employees for welding valves. Valve is lowered a little more into the "hole" while being welded while the front cover comes up. (Aircoloy No.



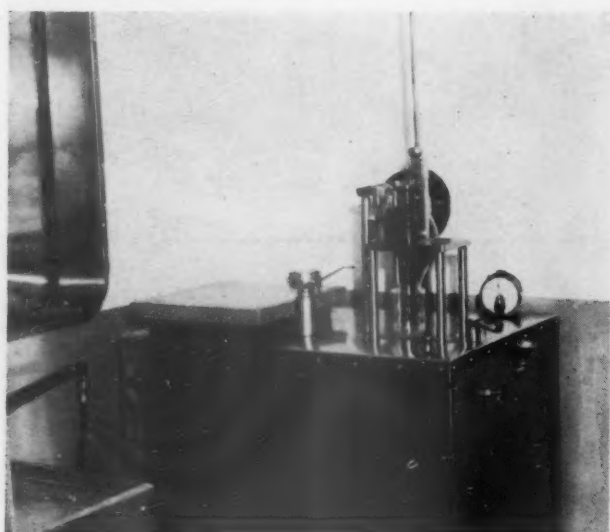
6 is the rod used in the build-up.) Once valves are welded they go into the lime at the right for cooling before being machined with Carboloy No. 883 tool steel cutters



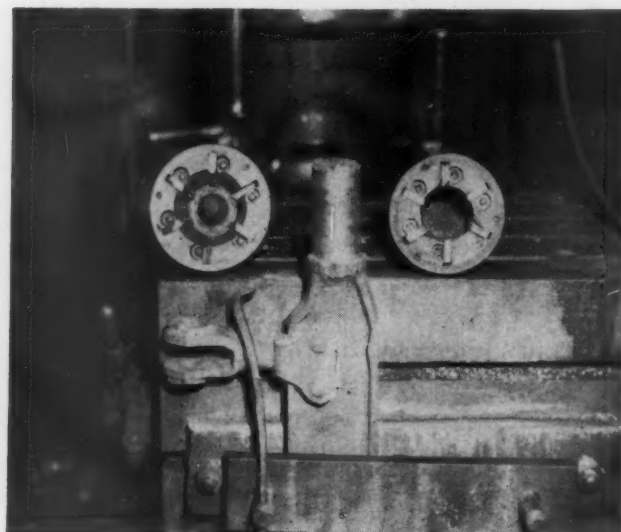
These diesel pistons are welded by the heliarc process using Aircol aluminum No. 26 rod. If ring grooves are worn more than 0.01 in. they are built up and machined off. The piston here is sitting on a jig made by the A.C.L. shop forces from scrap rolls and an old 1/6 hp. motor which turns the rolls and the piston at just the right speed for the welder to work on the piston



Cleaning bath (also shop built) with injector parts in tray at left. An air pump keeps the cleaning fluid stirred up. As pressure in reservoir is built up to 70 lb. by the pump the pressure opens a valve, which allows the air to escape and forces cleaning fluid into the filter (upper left). This cleaning fluid is reused (because of filtering) so that only about 9 gal. are used each month to clean between 200 and 300 injectors



This shop-made injector tester is capable of building up pressure to 1,500 lb. After it becomes clear that injector nozzles are not clogged, if pressure drops from 1,000 lb. to 400 lb. in 50 sec. or less the injector must be reworked



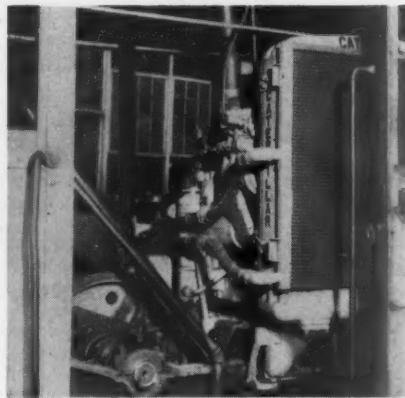
Passenger-car brake beams are built up from 1 3/8 in. to 2 3/8 in. with No. 387 Aircol welding rod. Then they are turned down to 2 1/2 in. The cutter at left tapers end of beam enough to give 2 1/2 in. cutter (right) a chance to start work

New and Improved Products Of the Manufacturers

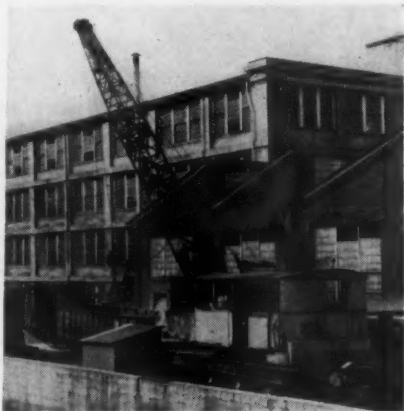
Diesel-Hydraulic Unit Applied to Crane

Among the newer applications of diesel power to the conversion of locomotive and steam-powered cranes is a package diesel-hydraulic power unit available from the Caterpillar Tractor Company, Peoria 8, Ill. A recent installation for this type unit has been completed at the Walworth Company's works in Greensburg, Pa., on a 15-ton Link-Belt locomotive crane employed to switch and spot cars in the yard as well as to handle raw materials with a bucket or magnet.

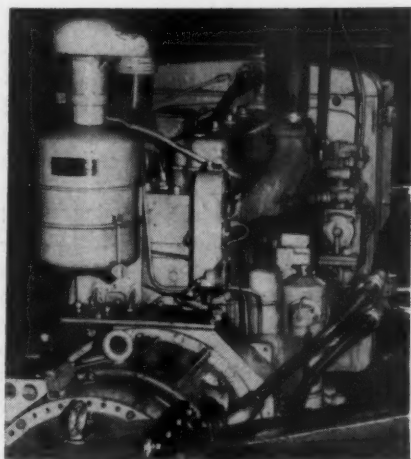
The crane has been repowered with a Caterpillar D315 steam crane con-



Front view of the Caterpillar D315 diesel engine which replaced a gasoline engine on a 15-ton locomotive crane



15-ton Link-Belt locomotive crane repowered with a Caterpillar D315 steam crane conversion package consisting of a 73-b.hp. diesel engine directly connected to a clutch and Twin Disc series torque converter



Rear view of Caterpillar D315 diesel engine showing engine directly connected to clutch and Twin Disc series torque converter—Immediately behind the torque converter, an integral chain housing is mounted for chain driving the drive shaft formerly powered by a 100-hp. gasoline engine

version package consisting of a 73 b.hp. (at 1,800 r.p.m.) diesel engine direct-connected to a clutch and a twin disc torque converter. Immediately behind the torque converter, an integral chain housing is mounted for chain driving the drive shaft formerly powered by a 100-hp. gasoline engine. The clutch, torque converter and chain housing are packaged in one assembly.

The torque converter is a three-stage unit with cooling accomplished by mounting a separate radiator in front of the engine radiator. This converter-radiator is of sufficient capacity to cool the converter, even though the engine and converter are being used to "hold" a load. The torque converter has a broad efficiency curve with a high work rate at low hook speeds.

The clutch is part of the Twin Disc converter package and is mounted integrally. An additional pulley is provided on the engine crank-shaft at the front of the engine for driving the air compressor that supplies air for braking.

Throttle controls are mechanical. The operator can set the engine throttle at a given speed and the torque converter will automatically adjust its output shaft speed according to the load being handled. The torque converter furnishes the necessary torque multiplication to start a number of heavily loaded cars when the crane is being used as a switcher. In operation, the load can be held by adjusting the engine speed, and the operator can raise or lower from the hold position by increasing or decreasing the speed of the engine.

Caterpillar offers these diesel-

hydraulic packages for locomotive and wrecking cranes in capacities from 15 to 150 tons. Arrangements are also available for those units that use a reversible steam engine.



A 6,000 lb. capacity diesel-powered fork truck designed primarily for outdoor use recently was announced by the Philadelphia Division of the Yale & Towne Manufacturing Company, Philadelphia 15, Pa. A six-cylinder Hercules engine with a continuous rating of 70 hp. drives the "Diesel-Lift," which is equipped with a fluid transmission. This engine makes possible a speed up to 13 m.p.h. Length of the "Diesel-Lift" to the face of the forks is 113½ in.; primary lift is 66 in.; tilt is 5 deg. forward and 15 deg. to the rear; overall width is 62 in.; and the weight of the truck is 9,600 lb.



Recently announced by the Buda Company, Harvey, Ill., is its new model 1-ton capacity fork truck, available with both 24 in. and 15 in. load centers. This truck is powered by a 4-cylinder gasoline engine which drives the unit at speeds up to 7 m.p.h. The FB20 line, as it is known, is available with five standard masts which provide lifts of 72, 84, 108, 114 and 120 in. Outside turning radius is given as 62¾ in., width as 32 in. and wheelbase 38 in.



Testing a rail joint with an Audigage Flaw Detector equipped with a "back saver" searching unit

New Searching Unit For the Audigage

A "back saver" searching unit for the Audigage Flaw Detector—an instrument designed for testing rails within joint bar limits—has been announced by Branson Instruments, Inc., Stamford, Conn. The new searching unit, which is directly interchangeable with existing hand-held searching units, consists of a telescoping aluminum handle, adjustable in length from 30 in. to 42 in., and a double-swivel-mounted crystal that is said to remain in perfect contact with the surface of the rail regardless of accidental tilting of the handle. The company says that, with the new searching unit, more than 1,000 rail joints have been tested by one man in an 8-hour day.

The company also reports that, because the crystal is protected by a quartz wear plate, the Audigage is now applicable for testing longer stretches of rail, such as rail through highway crossings, tunnels, station platforms, and water troughs, and for testing frogs and switch points.

The Audigage Flaw Detector employs ultrasonic resonance to generate a tone in a set of headphones worn by the operator, while the crystal, accurately centered over the rail web by an adjustable, insulated guide rod, is moved along the top of the rail. A perfect rail causes resonance at a frequency reflected in a steady tone in the headphones; the presence of a crack or other flaw is revealed by a distinct change in the pitch of the tone. The new searching unit weighs 1½ lb., and the complete outfit, 13 lb.

Plastic Cover Lens

The American Optical Company, Safety Products Sales division, Southbridge, Mass., has developed a new plastic cover lens for protecting more costly filter lenses from scratches and from hot-metal spatter. The company says that the new lens is more durable than those made of ordinary glass and plastics and will remain pit-free longer. Also, it has shock-absorbing qualities which prevent cracking upon impact.

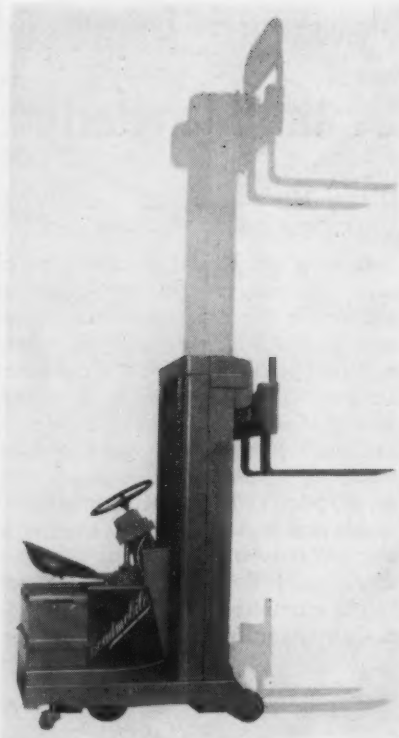
In the new cover lens the center portion is raised. Thus, when the lens is applied to a filter lens, an air space exists between them which automatically minimizes fogging.



An "extra-heavy" clamp device for handling heavy, bulky loads without use of pallets is available from the Industrial Truck Division, Clark Equipment Company, Battle Creek, Mich. This device is made to fit Clark's Utilitruc models, both gas and electric powered, with capacities up to 7,000 lb., and the Yardlift-60, gas-powered pneumatic-tired 6,000 lb. model. The builder says that this device, while similar in design to the Clark standard heavy duty clamp, is more ruggedly built with heavier slide arms and guides to permit increased arm travel. Clamp arms can be extended from a minimum opening of 24 in. to a maximum opening of 95 in. Overall width of the clamp assembly with arms closed is 67 in.



The Underwood Sundstrand Composite Model C-AR, available in either single or double keyboards, has been introduced by the Underwood Corporation, New York 16. The C-AR is equipped with ten key keyboard, automatic column selection, flexible date keyboard and front feed carriage. Also provided are automatic register total or subtotal and automatic adjustment of register total, plus automatic proof on every posting.



An electric-powered fork lift truck of 2,000 lb. capacity, made by the Materials Handling Division of the Market Forge Company, Everett, Mass., has been added to that company's line of materials handling equipment. The truck is powered by a 12 volt storage battery (weight, 500 lb.) of 340 ampere hour capacity, which delivers a full-load speed of 3 m.p.h. over level floors, the manufacturer states. The overall length of the new Market Forge fork truck, exclusive of forks, is 55 in. while the width is 31 in. Free lift is 63 in. before any parts of the machine start to rise. The standard total lift provided is 83 in., but the maker says that additional lift may be provided, up to 126 in. maximum.

Non-Chromate Corrosion Inhibitor

Chromate corrosion inhibitors for the cooling systems of diesel locomotives have been approved by all major diesel builders and, generally speaking, are producing satisfactory results.

But chromate is becoming short in supply as a result of the increasing demand for chrome chemicals in defense production, and, in the event of war, may become totally unavailable, because the ores from which it is made are practically all imported from Africa, Turkey and a few other sources.

Over a year ago the Dearborn Chemical Company, Chicago, initiated a research program aimed at the development of alternate corrosion inhibitors which could be used in diesel cooling systems instead of chromate if the shortage of that chemical persists or if it becomes unavail-

able. This work culminated last fall in the development of a non-chromate inhibitor which has been designated as Dearborn Cooling Water Treatment, Formula 524A. The new material is currently under field test on the Nashville, Chattanooga & St. Louis, at Nashville, Tenn., and at other locations.

At Nashville samples of cooling water have been collected daily from test locomotives for field determinations of inhibitor concentrations, and at weekly intervals samples have been sent to the Dearborn laboratories for complete chemical analysis. The company reports that these analyses have shown consistent maintenance of a protective concentration of the inhibitor in the cooling water, and a low concentration of metal in the water, which means that corrosion was being controlled. An inspection of the cooling system of a test locomotive after 120 days of operation was said to reveal no evidence of corrosion.

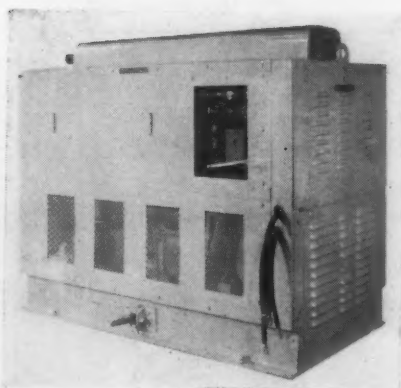
The concentration of Formula 524A as recommended by Dearborn is 0.75 oz. per gal. of water. In the field the concentration of the chemical in water may be determined by use of a conductivity-type instrument such as the Dearborn Concentrometer. The concentration may also be determined by the more recently developed colorimetric test.

The manufacturer states that the new inhibitor formulation is not compatible with chromate materials and is not intended for use with chromate-type treatments. Before starting to use Formula 524A, cooling systems formerly containing chromate-type treatments should be drained and thoroughly flushed.

Plastic Map Stick

The Ross-Martin Company, Tulsa, Okla., has announced development of a new plastic map stick designed to simplify mounting of maps, tracings, drawings and blueprints. The new lightweight, inexpensive all-plastic stick utilizes only curved plastic grippers to hold maps, drawings, etc., by tension. No tools, nails or glue are needed.

Quickly detachable, the map sticks are claimed to offer new speed of use to rolled map users and to give blueprint, drawing and tracing users a method of filing never before thought possible. Previously, the company says, valuable maps were nailed or glued to heavy wooden sticks. They may now be rolled and filed easily in tubes, reducing handling time to a minimum.



Diesel power now is available for fork-lift trucks, automotive cranes and similar equipment, according to a recent announcement by the Ready-Power Company, Detroit 8, Mich. Four models are available to power trucks of 6,000 lb. capacity or larger. The model shown here is the RD-14-DX for electric trucks of 30,000-50,000 lb. capacity

Loading Resistors for Diesel-Electric Locomotive

A new portable loading resistor (Type 17EM55D2) for load testing diesel-electric locomotives up to 2,500 hp. has been announced by the General Electric Company's Locomotive and Car Equipment Divisions, at Erie, Pa. The resistor is rated at 3,450 amp. continuous, and 4,000 amp. for 15 minutes.

The unit was designed for run-in tests, running in new bearings and similar parts, setting generator current limit, and setting diesel horsepower obtained over the constant horsepower portion of the generator characteristics. The new resistor is a completely self-contained unit, requiring no external mechanical, liquid, or electrical connections except the power cables connecting the locomotive and the resistor. Resistor loading is constant, not varying from cold to

hot. Mounted, the loading resistor is easily moved by a battery truck, and can be used indoors or outdoors.

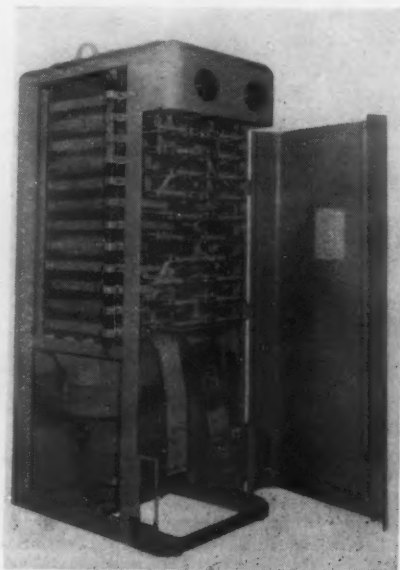
The resistor assembly consists of 12 air-cooled resistors. Elements are aluminum-chromium-iron resistance alloy in parallel strips providing maximum surface area for cooling. Designed to operate at maximum temperature of 350 deg. C., the elements are supported in frame slots to permit expansion of elements under load. The resistor frame is made of asbestos-lumber insulation with strip-steel supports to withstand high temperatures.

A blower unit is mounted vertically, commutator end down, under the loading resistors. An air diffuser between fan and resistors distributes air from screened intakes at the base over the resistor assembly to dissipate heat generated by the electrical load. Blower speed automatically increases with resistor load. To insure that the resistor will not operate without the blower, power from the resistor operates the blower.

Testing points are obtained by a combination of switches on a panel inside the resistor door. Knife switches are easily set to the testing point desired, and the door is closed to provide a dead front.

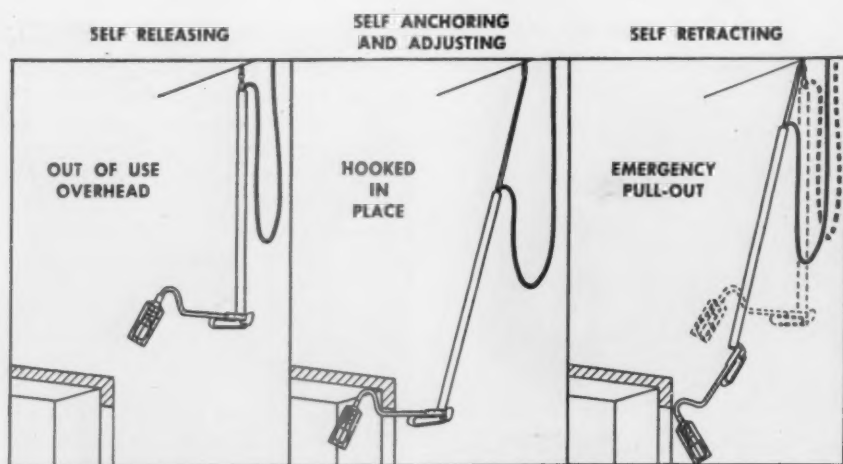
Two high-accuracy, long-scale, switchboard-type instruments are permanently mounted on the case above the access door. Output is indicated in volt and ampere ratings, and is easily converted to horsepower. If desired, portable instruments can be attached to the unit to permit readings in the locomotive engine room.

To operate the loading resistor, the operator selects a desired resistance step by closing the proper switches on the switch panel. The power plant is then started and brought up to speed, and readings are made from the instruments to determine output. Before changing to a different resistance step, the power plant is idled so switching is not done under load. All generator fields or main shunts should be included in the load test circuit to control the characteristic.



Swedish Calculator Comes to U. S.

An electric calculator, whose two-bank keyboard contains only ten digits, recently was introduced in the United States by Facit, Inc., New York, an American subsidiary of Aktiebolaget Atvidabergs Industrier of Stockholm, Sweden. The distributor states that Facit machines feature an internal cylinder construction that permits the machine to revolve forward for the figures 1-5 and backward for the figures 6-9, so that the



An overhead suspension, interior illuminator for installation on loading platforms has been developed by the Pyle-National Company, Chicago. In a freight house installation, the Anchorlite is designed to be suspended from a messenger wire on which it can slide full length of a loading platform. A spring-loaded telescopic anchoring device provides up to three feet of expansion in length. The anchoring arm may be

pulled downward with a cord or a hook and placed in the top of the car doorway, where it will support itself. The manufacturer explains that the Anchorlite is designed to take care of all variations in freight car door height. The Anchorlite is released from its doorway position by unhooking it with a slight downward pull. Then it automatically retracts to the overhead, out-of-the-way position



Facit never makes more than five revolutions.

A shop for maintenance of these calculators has been set up in New York, with what the company says is an estimated 10 year supply of spare parts. Facit also distributes manually operated calculators and all models are said to be available for immediate delivery.

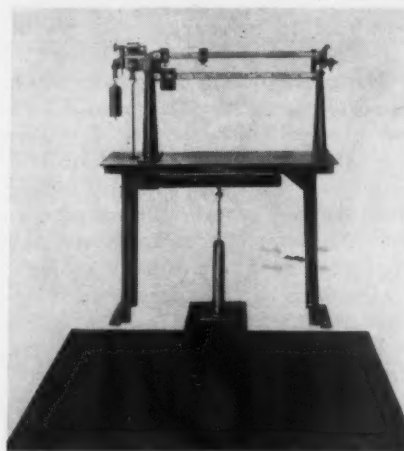


The Ready-Power Company, Detroit 8, Michigan, has just announced a new gasoline model power unit for electric industrial trucks. This model, the H-A, is said to be suitable for trucks of the following design and capacity: for fork trucks of 4,000 lb. capacity; platform trucks which will handle loads of 10,000 lb.; and crane trucks which will pick up 6,000 lb.

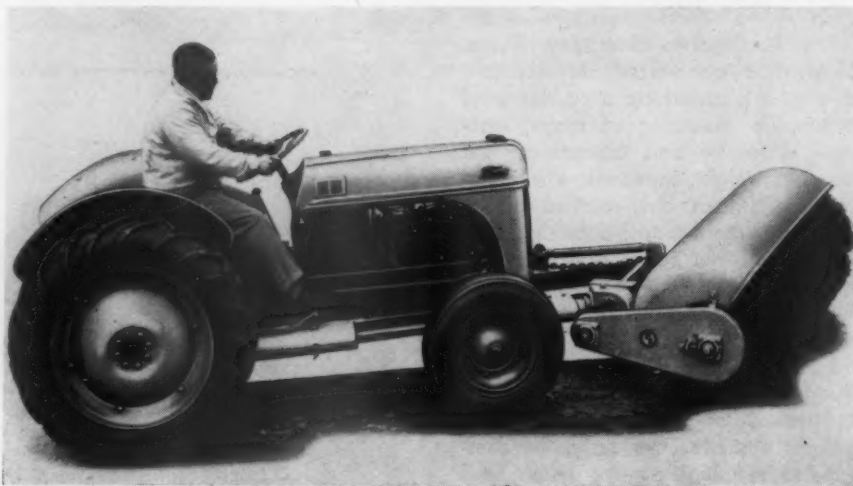
Platform Scale

A new heavy-duty platform beam scale, called the Load King, designed for fast, accurate weighing, particularly in applications where "shock loading" is the rule, has been announced by the Yale & Towne Manufacturing Co., Philadelphia Division, Philadelphia, Pa. The lever system in the platform, as well as all other key parts, is of all-steel construction. The poises on the main bar are mounted on roller bearings for rapid positioning.

The scale platform, which is mounted on outboard bearings, absorbs the shock of moving loads, preventing damage to the scale. Moreover, for any particular load, it always gives the same reading regardless of the position of the load on it. The scale requires a pit only 11 in. deep.



The Load King is available in self-contained or semi-self-contained models, in capacities up to 6,400 lb., and in platform sizes ranging from 46 in. by 38 in. to 76 in. by 54 in.



A new sweeper, especially designed for application to Ford tractors is offered by the Meili-Blumberg Corporation, New Holstein, Wis. The manufacturer

says that the unit may be attached or removed in 30 min., and when at work will sweep a 5 ft. swath at 30 deg. angle, with fiber or steel brushes



WHAT MAKES "PRECISION TRANSPORTATION"?

Performance begins with rolling equipment design; next comes maintenance and utilization—Why the N. & W. sticks to coal

By H. C. WYATT

Assistant general superintendent of motive power
Norfolk & Western

The performance of a railroad's rolling equipment starts with its design. In this respect, we on the Norfolk & Western are extremely fortunate. Our design engineers have, for many years, practiced good engineering, based on sound principles of design. The equipment designs conform to good shop practices. Our designers have been able to see their creations being produced in the shops and subsequently have observed them in operation. They have the benefit of advice and suggestions from those responsible for the operation and maintenance of the equipment. They also have been able to see the designs and completed equipment of other railroads.

These fortunate conditions are possible only where the engineering, production, operating and user groups are all parts of one well organized and closely coordinated team, and stem largely from our railroad's policy of designing and building the major portion of its new equipment in its own shops.

Working in these fruitful surroundings, the designing

This article is adapted from an address delivered at the 26th annual Better Service Conference held by the N. & W. at the Hotel Roanoke, Roanoke, Va., April 13 and 14.

group becomes more and more able to maneuver its designs so as to avoid many of the maintenance and operating difficulties which normally might be expected and experienced. A sound design, along with good workmanship in production, results in a high quality product. While this kind of product generally has a little greater initial cost, this is justified by longer life and dependable performance. Our management not only has accepted but has insisted upon equipment of top quality. Our designers and producers have not been forced to cut corners and make sacrifices in order to meet a specific selling price. In this respect, also, we are fortunate. The result of this policy is that we now have locomotives and cars unsurpassed by those of any other railroad.

Nullification by Bad Maintenance

At this point, let us remind ourselves that we are all engaged in making a product—a service—that must be sold in competition with the products of other transportation agencies to buyers in the transportation market. Our salesmen—the members of the Traffic Department—endeavor to sell our product by stressing our slogan, "Precision Transportation." "Precision Transportation" means on-time performance of scheduled trains, both passenger and freight. It also means uniform, dependable movement of our unscheduled tonnage trains. In these days when

materials are hard to get and inventories are low, it is imperative that the goods of our shippers be delivered to their customers exactly as scheduled.

Regardless of the acknowledged fact that our J, A, and Y-6 locomotives are the most modern ever built . . . regardless of our pride in them as products of our own design and workmanship . . . and regardless of the engine terminal facilities that have been provided for servicing and maintaining these locomotives . . . their performance is at times disappointing.

That performance is disappointing when a train is delayed as the result of an engine failure caused by poor or improper workmanship by the roundhouse mechanics. There is no allowance in the meaning of "Precision Transportation" for performance of this kind. And there is no reasonable excuse for failures of locomotives when the roundhouse force has ignored or misinterpreted the report of an engineman on a locomotive defect. Moreover, it is not "Precision Transportation" when a piece of track material finds its way into the coal supply, resulting in a stoker failure and train delay. "Precision Transportation" is difficult to achieve when older and less modern locomotives have to be used because a modern engine is out of commission for renewal of a set of costly driving-wheel tires which the engineman has permitted to become flattened. "Precision Transportation" is not possible when a water-station attendant lets his chemical feed get out of adjustment or run out, thus putting untreated or crude water in the storage tank and causing poor boiler performance. We can't have "Precision Transportation" when the water-service supervisor allows mud to accumulate in the water tanks, the mud later finding its way to the locomotive tender and boiler and causing poor road performance and boiler damage.

Cooperation Extremely Important

On the other hand, "Precision Transportation" becomes easier when everybody cooperates and realizes the importance of his job to the total effort of the railroad. It becomes easier when engine crews—after experiencing a failure of some part of the engine—take the necessary steps to shorten the delay to their train by making emergency repairs, rather than calling for another engine, or waiting for the arrival of shop men.

As an illustration of this, we might review the results of the all too numerous pipe failures on locomotives, which have occurred in recent months. A survey has shown two different results following the failure of the same pipe on a locomotive. When some of these failures occurred, the engine crews walked to the telephone and either ordered another engine or called for shop men to make repairs. In each instance, the train was seriously delayed. In contrast, the crews of other engines—men who had greater interest or better training—made improvised repairs, such as inserting a coin in a union, plugging the broken pipe with a flag staff, or mashing together the ends of the faulty pipe, with a total standing train delay of as little as five minutes. I mention these deficiencies in the maintenance and operation of our equipment so as to emphasize that the best locomotives must have the proper repairs and operation.

All of our principal passenger trains are made up of relatively new cars for both coach and Pullman passengers. Our crack, streamline coach train, "The Powhatan Arrow," is modern, comfortable and safe. In drawing up the specifications for our new passenger equipment, our people went all the way to procure the best, and particularly so in those features of the cars which affect passenger comfort. To assure this comfort, it was neces-

sary to use a considerable amount of complicated lighting, air conditioning and heating apparatus. And to prevent failure of this apparatus, skilled men must inspect it and maintain it. The train crews also must have a thorough understanding of the controls for operating it.

Here again, we have to remember that our performance has a direct bearing on the quality of our service to the travelling public. We should remember that a passenger train 30 minutes late, or a hot, uncomfortable car, probably will be just as disturbing to a passenger—who might be the shipper or receiver of a substantial volume of freight—as the late arrival of a carload of refrigerators or a 40-car cargo of coal for which a boat is waiting at the piers.

Lastly, but perhaps most important of all, is the freight car. It is important, first, because of the number we own and use. At the end of 1950, we owned 492 locomotives and 380 passenger cars. At the same time our ownership of freight cars was 56,943. This means that for every one of our locomotives there are 115 freight cars.

Freight cars are important in another respect because frequently our capacity to handle business is measured by the number of cars available. If delays to our entire ownership of freight cars could be reduced just one and one-half hours per day, this improvement would make available enough cars to take care of an entire day's loading. The making of this improvement depends upon improving the road performance of the car, which is directly affected by derailments, break-in-two's, hot boxes and the number of bad-order cars. These conditions, in turn, are largely influenced by maintenance, operation and use of the cars.

Deraillments seriously interrupt traffic. They result not only in damage to the equipment involved, but delay to the movement of other trains. The most prevalent causes of derailments are parts dragging under equipment, broken wheels and sprung journals. The number of derailments, due to these causes, can be greatly reduced by better maintenance, closer inspection by maintenance forces at terminals, and more alert observation of the equipment in trains by crew members on both the locomotive and caboose.

Break-in-two's are potential derailments. They can be reduced in number by better maintenance and more skillful handling of trains.

Hot boxes—the headache of successful train operation—are always a problem. In the final analysis, cars develop hot journal boxes because of improper or inadequate inspection or workmanship by the maintenance men in the transportation yards. The serious potential damage of a hot box can be prevented by alertness and promptness on the part of train crews in detecting and setting out cars having these defects.

The last factor of freight car performance and availability which we have mentioned is the number of bad-order cars. Here again, the quality of maintenance, whether good or bad, plays a big part. Much of the car damage we have occurs with the starting and stopping of a train. Anyone who can prevent the unnecessary stopping of a train can reduce car damage. Moreover, recent observations have shown that more freight car damage than ever before is due to high-speed impacts in the terminals and yards.

There is now, all over the nation, a shortage of box cars. While new cars are being built as fast as steel is made available, some improvement could be made in the situation by reducing the number of cars out of service for repairs. A considerable amount of repair work on box cars is made necessary by contamination of the siding and flooring, rather than by actual wear.

This points up the opportunity many of us have to be more careful in our selection of cars for loading. Our people in the yards and terminals, at the stations and warehouses, our yard and shifter crews—all should exercise care so that cars suitable for clean freight are not loaded with rough freight or freight of a contaminating nature.

So far, we have examined our weak spots so that we may find ways and means of strengthening them and improving our performance. It is also well to compare our present accomplishments with past records, and thus better judge our progress.

In reviewing Norfolk & Western equipment performance, we find that during 1950 we handled considerably more business, as measured by gross ton-miles, than in 1925, with only half the number of locomotives used 25 years ago. Our locomotive performance, as measured by locomotive miles per engine failure, also was much more reliable. In fact, it was five times better in 1950 than it was in 1925. The derailment record, last year, was almost four times as good as in 1925. In 1925, we had between four and five times as many break-in-two's as we had in 1950. The number of hot boxes last year was less than one-sixth the number we had in 1925. The car mileage per car set-off because of a hot box was six times better in 1950 than it was 25 years ago.

Why N. & W. Sticks to Coal

In connection with equipment, you probably are interested to know why our railroad—almost alone among the country's roads—not only continues to operate steam locomotives, but continues to build new ones. Our situation differs from that of most other roads in two respects. First, we have available along our railroad, in almost unlimited quantities, the cheapest known fuel—coal. It is coal of the finest quality for power generation. Second, when other railroads began to turn to other types of power, we already had in service a substantial number of modern coal-burning steam locomotives. The railroads on which the greatest number of steam locomotives were replaced by other types did not have fleets of steam power as reliable, efficient or as modern as our own J's, A's, or Y-6's.

Regardless of what you may have read or heard about the steam locomotive, you should not overlook its virtues. First of all, it is an extremely rugged and simple machine. It will better withstand abuse than any other type of locomotive in existence. It has the ability to develop its maximum power quickly when needed. The best illustration of this quality is the locomotive boiler's ability to evaporate in a given time ten times as much water as the most efficient stationary steam plant boiler. Yet its size and weight is only one-tenth that of a stationary boiler.

In spite of the steam locomotive's virtues, however, we are not complacent over what we now have. The relatively low overall efficiency of the conventional steam locomotive is recognized. It is extremely difficult to visualize any substantial improvement in this efficiency, because of the heat units necessarily wasted in using water to convert heat units from the burning fuel to the steam work units used against the locomotive pistons. A tremendous quantity of heat units is required to convert water at its boiling point to steam at the same temperature. Since the final exhaust from the locomotive cylinders is in the form of steam, then it is impossible to recover those heat units used in making the conversion from water to steam. One means of improving the efficiency of the steam locomotive is by increasing the boiler



pressure in order to get more work from a given quantity of water. The boiler pressure of the conventional steam locomotive has today reached what is now regarded as its maximum. To utilize higher pressure and higher temperature steam, we must turn to a boiler type and prime mover different from today's cylinders with reciprocating pistons.

New Types of Coal-Burning Power

In recognition of this situation, our railroad is now working with a group of three manufacturing concerns in the development of a coal-fired steam turbine locomotive with electric drive. Steam will be generated in a water tube boiler at a pressure double the 300-p.s.i. carried in our present-day locomotives. The steam will be utilized in driving a steam turbine, which in turn will drive an electric generator supplying current to power the traction motors. The boiler of this locomotive has been completed and tested, and the development at this stage appears to be promising.

Several years ago our railroad, together with several other roads and coal companies, began studies on a radically different and new type of locomotive, one that would meet the need for locomotives of greater efficiency and would use coal as fuel. To substantially improve efficiencies, it was agreed at the outset that we must get away from water and steam. An arrangement finally agreed upon was a coal-fired gas-turbine-electric locomotive. In this locomotive, the products of combustion are utilized directly in turning a gas turbine, which in turn drives an electric generator supplying current to traction motors. The development of this entirely new locomotive has been, as might be expected, comparatively slow. Today, however, the development looks more promising than ever before. An improvised equipment set-up has been operated under test for a total of 1,000 hours. At this time, a complete set-up, built to specifications for a locomotive, has been assembled on a test block the exact size of the proposed locomotive chassis. This equipment soon will be placed in operation under test. We look to the future of the coal-fired gas-turbine electric-drive locomotive with a great deal of confidence.



"Rocket Freight" train on the Rock Island. Standard railroad radio equipment is installed on the locomotive, and a walkie-talkie set is used on the caboose for end-to-end communication

RADIO ON ALL THROUGH FREIGHTS

On 1,842 Miles of the Rock Island . . .

Walkie-talkies used on cabooses and standard railroad radio equipment on locomotives—Equipment is on order for another 1,284 miles

All through main-line freight trains operating over 1,842 miles of road on the Chicago, Rock Island & Pacific have been provided with two-way end-to-end radio communication; equipment is on order for similar use over another 1,284 miles; and the road is considering the use of radio on an additional 829 miles. Routes over which the train communication is now in service are indicated on the accompanying map by heavy solid lines; those for which equipment is ordered, by cross-hatched lines; and routes which are being considered, by light solid lines.

An interesting feature of this project is the use of 1/4-watt walkie-talkie type radio sets on the cabooses which, according to Rock Island communications officers, are proving successful from many standpoints. These sets have a coverage of about 6 miles under ideal conditions. Standard 30-watt railroad radio equipment, with coverage of 20 to 30 miles, is in service on the locomotives.

Important among the factors in the Rock Island's decision to adopt walkie-talkies for cabooses was the evidence that, in the operation of trains equipped with end-to-end communication on the railroads in general, the majority of calls are initiated on the cabooses. It was felt, therefore, that this type of equipment on cabooses would be entirely adequate and satisfactory in meeting the road's particular train communication

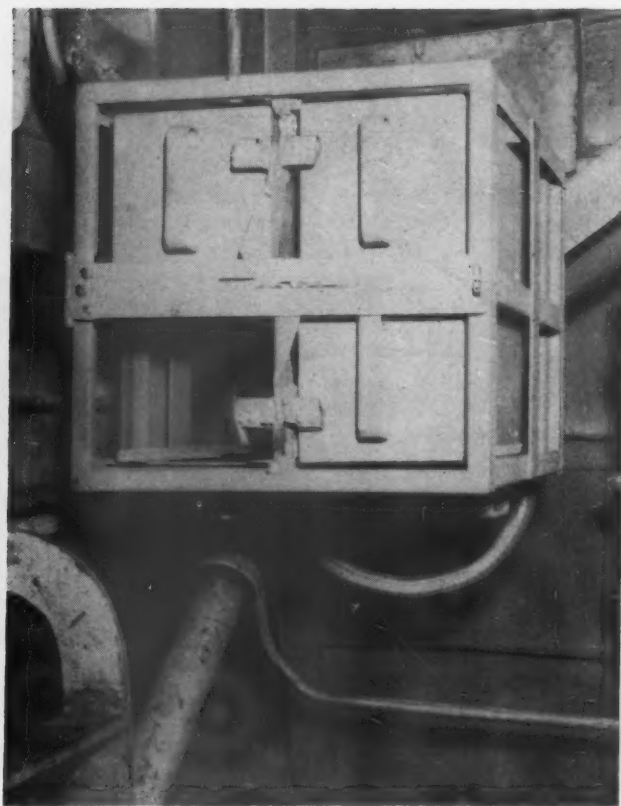
needs, though calls cannot be originated on the locomotives.

Should a train reduce speed or stop for any reason unknown to the conductor, such as for a wayside signal, or because mechanical difficulties are observed from the head end, he immediately contacts the locomotive with his walkie-talkie, asks the reason for the stop or reduction in speed, and then issues any necessary instructions for further handling or protection of the train. If the engine crew desires to contact the conductor in a hurry, which is seldom necessary, he is notified by whistle signal, and then can converse by radio.

On the 1,842-mile completed portion of the installation, there are 14 three-unit pooled-service diesel-electric freight locomotives and 80 assigned cabooses. Radio transmitting-receiving equipment is installed on 14 of the locomotive "A" units, and plug-in facilities on the other 14 "A" units to transfer the equipment to those units if the first "A" units are taken out of service. A train-line connection through each of the "B" units permits this transfer, and provides remote control of the radio from either "A" unit cab. These locomotives are



Member of crew in caboose of through main-line freight conversing by radio with the engineman over walkie-talkie set shown in rack at top of picture



The radio-transmitting-receiving equipment on the locomotives is mounted in a four-unit rack installed in the nose of the "A" units, as shown here

seldom split; when they are, units removed are replaced by similar units. The radio-equipment arrangement is, therefore, quite satisfactory, and is more economical than fully equipping both ends.

Twenty-eight walkie-talkie radio sets with self-contained storage-battery power serve the 80 assigned cabooses, these sets being turned in by the train crews at the ends of their runs and picked up by other crews for further use. Maximum utility is thus obtained from the radios, and it is unnecessary to install permanent equipment on the cabooses, other than a radio rack and an antenna. This is a large financial saving in initial cost of radio and power-supply equipment.

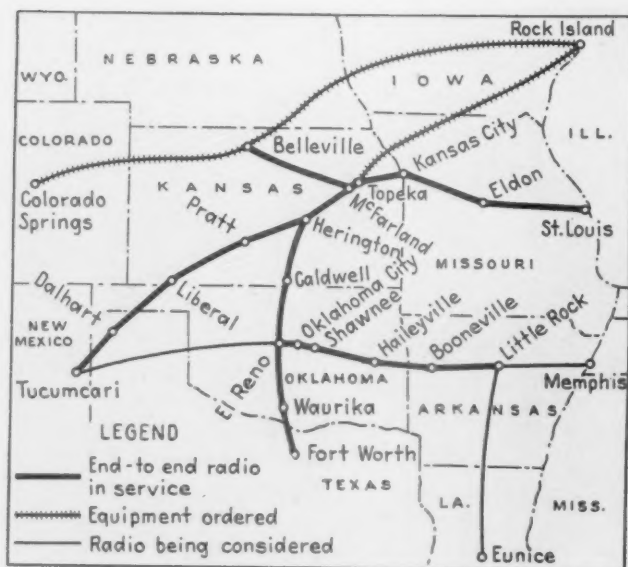
The 1,284-mile second portion of this radio project, when completed, will include an additional 14 pooled-service freight locomotives and 80 assigned cabooses. The locomotives will be equipped like those described, and 28 more walkie-talkies will serve the additional cabooses. If freight trains are added in the future, all that will be necessary will be to increase the number of walkie-talkies.

That part of the project now in service, as shown on the map by the heavy solid lines, includes the following main lines of the Rock Island: (1) Kansas City, Mo., to St. Louis, 300 miles; (2) Kansas City to Herington, Kan., 151 miles; (3) McFarland, Kan., to Belleville, 104 miles; (4) Herington to Tucumcari, N. M., 463 miles; (5) Herington to Fort Worth, 444 miles; and (6) El Reno, Okla., to Little Rock, Ark., 380 miles. The diesel-electrics handling freight trains on these lines, which total 1,842 miles of road, are in a pool out of El Reno, where they are serviced every 10 days.

As indicated on the map by the cross-hatched lines, the main routes for which radio equipment is now on order include: (1) Topeka, Kan., to Rock Island, Ill.,



Conductor of Rock Island freight train carrying 13½-lb. walkie-talkie set over his shoulder alongside of train and talking to engineman at the head end



Map of Rock Island routes with end-to-end radio now in service, for which equipment is ordered, and on which the use of radio is being considered

393 miles; and (2) Rock Island to Colorado Springs, 891 miles, or a total of 1,284 miles. Locomotives operating on these lines to be equipped are in a pool out of Silvis, Ill. In addition to these routes, and as indicated on the map by the light solid lines, the Rock Island is considering the use of radio between: (1) El Reno and Tucumcari, 361 miles; (2) Little Rock and Memphis, Tenn., 133 miles; and (3) Little Rock and Euniee, La., 335 miles, or a total of 829 miles.

The lines involved are for the most part single track, and with the exception of the Kansas City-St. Louis line they traverse rolling prairie country. The lines from Herington to Tucumcari and from Rock Island to Colorado Springs gradually ascend westward into the foothills of the Rocky Mountains. The Little Rock-Euniee line was formerly a logging road extending into the low-lying timber lands of Louisiana. The Kansas City-St. Louis line traverses the roughest terrain on the railroad involved in this radio project.

The walkie-talkies on cabooses are turned in by crews at the ends of their runs, and picked up by other crews for further use, each conductor being required to sign in and out for the set issued to him. On the completed part of this radio installation there are nine turn-in points. These include Eldon, Mo., on the Kansas City-St. Louis line; Herington, El Reno and Fort Worth, on the Herington-Fort Worth line; Pratt, Kan., and Dalhart, Tex., on the Herington-Tucumcari line; and Shawnee, Okla., Haileyville and Little Rock, on the El Reno-Little Rock line.

From Eldon, crews work west to Kansas City and east to St. Louis; from Herington, north to Kansas City and south to Caldwell, Kan.; from El Reno, north to Caldwell and south to Waurika; from Fort Worth, north to Waurika; from Pratt, east to Herington and west to Liberal, Kan.; from Dalhart, east to Liberal and west to Tucumcari; from Shawnee, turn-around to El Reno; from Haileyville, west to Shawnee and return and east to Booneville, Ark., and return; and from Little Rock, west to Booneville and return. At Eldon, there are six walkie-talkies assigned for use on nine cabooses; at El Reno and Shawnee, four; Haileyville,

five; and at Herington, Fort Worth, Pratt, Dalhart and Little Rock, two each. In addition to the six walkie-talkies and nine cabooses running out of Eldon, there are seven cabooses previously and permanently equipped with radio and power supplies which are assigned to St. Louis-Kansas City runs.

Freight train crews appreciate and have shown much enthusiasm over the end-to-end radio communication. Operating advantages which are being realized are numerous. For example, in cases where a member of the train crew from the caboose is alongside a train investigating trouble or performing other duties, he can carry and use his walkie-talkie to converse with the engineman and if necessary issue instructions. In many instances, this is saving considerable walking by crewmen who otherwise might have to walk all the way to the head end of the train to talk to the engineer. Delays in train time are thus reduced.

Shippers and Consignees Benefited

When trains are ready to leave yards, the conductor can highball the engineer by radio, thus eliminating the passing of hand signals and reducing the time required to get out of the yards. Similarly, when trains are pulling out of sidings to the main line, time is being saved by a member of the crew on the caboose advising the engineman when the rear of the train is out on the main line and all the crew are aboard. Otherwise, the engineer would possibly lag further down the line until he was absolutely sure that his train was clear of the turnout before accelerating, thus losing time.

The Rock Island's yards at Rock Island, Kansas City, Eldon and El Reno are equipped with radio, and other yard installations are authorized. Crews on radio-equipped road locomotives and cabooses can thus converse with the yardmasters at these points when approaching them. In many instances the yardmaster can inform the incoming train crew what track it is to take in coming into a yard, thus saving time. Likewise, if a train is departing from one of these yards and it has to be stopped for a last minute pull or addition of a car, the yardmaster can contact the train, which might not otherwise be possible. Delivery of a car to a consignee in such cases would be expedited considerably. The radio, therefore, is not only improving operations on the Rock Island, but is enabling the road to give better service to consignees and shippers.

If it is necessary to stop a freight train, for a hot box, dragging equipment, or for any other reason which may be observed from the rear end, the conductor can instantly call the engineer and instruct him to do so. This use of the radio is minimizing the number of break-in-twos and pulled draw bars often incurred by pulling the air from the rear end to stop a train. In one instance recently, a long, non-radio-equipped freight train broke in two on a curve and, after repairs, a member of the crew from the rear end spent 15 to 20 minutes walking tops of cars passing hand signals to the head end. Had radio communication been available, the delay in effecting repairs and getting the train started could have been reduced an estimated 30 to 40 minutes.

This radio communication program was planned and is being carried out under the jurisdiction of C. O. Ellis, the Rock Island's superintendent communications, and under the immediate supervision of H. T. Sagert, radio communications engineer. The major items of new radio equipment have been and are being furnished by Motorola, Inc. More details of the project and of the equipment involved appear in the June issue of *Railway Signaling and Communications*.



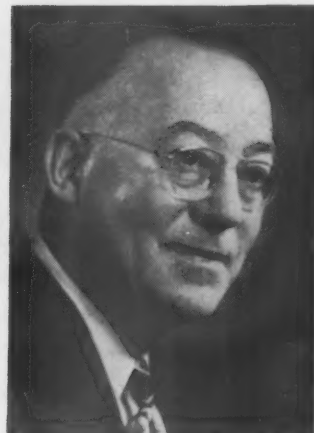
John M. Budd

The Great Northern Changes Chiefs

JOHN BUDD SUCCEEDS F. J. GAVIN



Frank J. Gavin



Ira G. Pool

When John M. Budd was elected president of the Great Northern on May 10, he became the youngest man in America to head a major railroad. He is now 43. But being president of a Class I carrier is not a new role to him; he previously had been president of the Chicago & Eastern Illinois. As *Railway Age* reported briefly on May 21, page 170, Mr. Budd succeeded Frank J. Gavin, whose Great Northern career began in 1897 and who had served the road as its president since September 1939. At their May meeting in St. Paul, the G.N. directors also named Ira G. Pool, who was general manager of lines east at Duluth, Minn., to succeed Mr. Budd as operating vice-president. Both Mr. Gavin and Mr. Budd have spent much of their respective careers in the road's operating department. Mr. Pool, on the other hand, came up through the ranks in the mechanical department, stepping into the operating department only in 1949 when he was named general manager at Duluth.

The Great Northern operates more than 8,000 miles of road serving the territory between the Twin Cities and the head of Lake Superior on the east and Puget sound on the west, closely paralleling the U. S.-Canadian border. Most of its traffic is in the products of mining, agriculture and forestry and a great percentage of its total freight traffic—aside from military traffic engendered by the Korean crisis—originates "on line." The numerous feeder branch lines which project northward from the main line, especially in the grain belt, are responsible for a large portion of this originating traffic. The 100-mile haul of iron ore from the Missabe range in Minnesota to the ore docks at Allouez (Superior), Wis., is another major source of such traffic.

Under Mr. Gavin's leadership, the G.N. has gained strength both physically and financially. He has continued the program of long term debt reduction begun under his predecessor, the late W. P. Kenney, which has affected important savings each year in fixed charges. In the years 1935 to 1946, for example, the total long

term debt was reduced by \$111,917,239, or 32 per cent, thereby bringing the annual interest charges down from \$18,775,665 to \$8,120,262. This reduction effort has been continued up to the present.

Physical improvements have enabled the road to effect further important savings while at the same time improving the character of services offered travelers and shippers. During 1950 30 additional new diesel-electric locomotives were acquired at a cost of over \$17 million. At the end of the year such locomotives were handling over 30 per cent of all passenger car-miles, over 70 per cent of all yard locomotive switching-hours and nearly 50 per cent of all freight gross ton-miles. Savings through the use of diesel power are evidenced by this statement in the G.N.'s 1950 annual report: "In spite of the increase in train service from the larger volume handled, and an increase in the unit cost of various classes of fuel, the total charges for train and yard fuel in 1950 were approximately \$700,000 less than for 1949. Locomotive repair costs decreased more than \$600,000 in 1950 reflecting the increased use of diesel power."

On the passenger side, the G.N. will shortly have 14 streamline trains in service. As final deliveries from the carbuilders—expected very shortly—are completed, five completely new "Empire Builder" trains, six "Western Star" trains—all assigned to Chicago-Seattle-Portland service in connection with the Burlington and the Spokane, Portland & Seattle—two "Internationals" for the Seattle-Vancouver, B. C., service, and the "Red River" between the Twin Cities and Grand Forks, N. D., will be giving passengers the comforts and pleasures of a \$20 million stake the G.N. has placed in the future of the railroad passenger business.

Mr. Gavin's 54 Years

It was in 1897 that Mr. Gavin first became associated with the Great Northern. He was born at Alberton, Prince Edward Island, Canada, in December 1880. At the age

of 16 he took his first job as a combination office boy and ticket sorter for the railway's auditor of passenger receipts. Two years later he was transferred to the operating department as a timekeeper and eventually, chief clerk. In 1911 he became a trainmaster, a title which he held until 1916 when he was named division superintendent. After a stint as assistant general superintendent he became—in 1919—general superintendent of the Western district. Shortly thereafter he was transferred to the Eastern district (lines east of Williston, N. D.) becoming first general superintendent, then assistant general manager and finally general manager of the district, with headquarters at Duluth. From 1936 through 1939, Mr. Gavin was assistant to the president at St. Paul. He became a director of the G.N. at the time of his election as president in 1939 and he has also served on the board of the Burlington and the Colorado & Southern. He is both vice-president and a trustee of the Spokane, Portland & Seattle. In his new capacity as chairman of the G.N. board, Mr. Gavin will continue to be fully active in the affairs of the company.

Twice a President

John Budd's previous experience as president of a Class I railroad covered the period between June 1947 and May 1949, in which he was head of the Chicago & Eastern Illinois. Born into a railroad family at Des Moines, Iowa, in 1907 (his father, Ralph Budd, was later to become president of the Great Northern, then of the Burlington, and now is chairman of Chicago's Transit Authority), John Budd began his Great Northern career in 1926 as a chainman with an engineering party. During the summers of 1926 and 1927 he worked for the G.N. in this capacity. In 1930 he graduated from Yale University with a bachelor of science degree. From 1930 to 1932 he served as assistant to the road's electrical engineer and then returned to Yale for graduate work in transportation. During 1933 and 1934 he was assistant trainmaster at Willmar, Minn. He became trainmaster during 1934 and served in that capacity at Willmar, Sioux City, Iowa, Wenatchee, Wash., and Spokane. In 1940 he was named superintendent at Klamath Falls, Ore., and he later served in a similar capacity at Whitefish, Mont. With the outbreak of World War II, Mr. Budd, along with a group of other

young operating men, entered the Military Railway Service, first as a major and later as a lieutenant colonel with the 704th Railway Grand Division of the U. S. Army. His unit saw service in Algeria, Italy and France. Later he became commanding officer of the 727th Railway Operating Battalion, which carried on operations in France and Germany.

Returning to civilian life and the Great Northern, Mr. Budd became assistant general manager of lines east of Williston, N. D., serving from November 1945 until May 1947. In June of that year he took office as president of the Chicago & Eastern Illinois, being then the youngest president of any Class I railroad. He remained with the C. & E.I. until May 1949, when he returned to the G.N. to assume the post—operating vice-president—from which he has just been promoted.

Another "Vacation Railroader"

Like Mr. Budd, Ira G. Pool began his railroad career with a summer vacation job. Born in Minneapolis in 1891, he entered railroad service with the Soo Line as a helper in the car department. He later took a mechanical engineering course with the International Correspondence School and in 1910 became a mechanical draftsman for the Soo. In 1912 he became mechanical draftsman for the Utah Copper Company at Bingham, Utah.

In 1915 he entered the employ of the Gray Tractor Company of Minneapolis. Four years later he became a map draftsman for the U. S. Steel Company at Eveleth, Minn., but within a year he returned to the Great Northern, becoming first a locomotive designer at St. Paul and then (from 1923 through 1928) fuel supervisor at St. Paul and at Great Falls, Mont.

In 1929 Mr. Pool was named assistant master mechanic at Havre; one year later he was transferred in that capacity to Whitefish. In 1932 he was transferred to Klamath Falls as master mechanic and after subsequent service at Bieber, Cal., then Klamath Falls and later at Spokane, he became master mechanic at Grand Forks in 1936. During 1941 and 1942 he served in a similar capacity at Spokane whereupon he was named general superintendent of motive power with headquarters at St. Paul. It was from this position that he was appointed to the position of general manager at Duluth.

Communication . . .

Age Limit for Passenger Enginemen?

Cambridge 38, Mass.

TO THE EDITOR:

Within a year and a half, we have suffered five major rail disasters: Rockville Centre; Coshocton; Richmond Hill; Woodbridge; now, Bryn Mawr. All these wrecks were fatal. At least four were due wholly or partially to failure of an elderly engineman.

I believe it is time to reexamine the principle of seniority, as far as it applies to operators of passenger trains. Seniority is a strange anomaly which vests greater responsibility for human life in men who are less able to assume it. Stranger still is the fact that railroads are obliged to install devices such as the "dead man" and automatic train control to combat its shortcomings. But no mechanical device can fully insure against the failure of human judgment. Just as this judgment is reckless in youth, so it is slowed in years. You cannot flout Time. By realizing this, facing it, and refusing

to give an engineer more responsibility than a man of his age can cope with, the railroads will achieve greater safety than any mechanical device could ever give.

This is not an indictment of the aged. I do not suggest penalizing an employee for long and faithful service. But because of the awful responsibility in the hands of those who operate our modern passenger trains at high rates of speed, I believe the job is for younger men. With age the surgeon's hand becomes unsteady; the razor mind of the judge is dulled. Men in their 50's and 60's do not fly commercial airplanes. Nor do they drive buses. Nor should they run passenger trains.

The problem, of course, is to balance the employee's age against his knowledge and experience, and arrive at a point where the one will probably outweigh the other. The roads should then set an arbitrary maximum age for passenger engineers—perhaps 45 or 50—in order to avoid the abuses and hard feelings which might result from a policy based on consideration of each individual.

Seniority is a fine and venerable institution, but it cannot take precedence over human life. I believe the railroads should determine a "safe" maximum age, and refuse to put any man who exceeds it on the right-hand side of a passenger cab.

PARKER HAYDEN



(Left) Two agents at Kansas City, J. M. Traylor (left) of the Santa Fe and R. T. Kingman of the Gulf, Mobile & Ohio. Last year (see page 65 of the June 17, 1950, *Railway Age*) they looked somewhat different! (Right) C. C. Cook, agent of the Western Weighing Inspection Bureau, Des Moines, Iowa, in



shirtsleeves, portrays a discourteous yard clerk telling customer Fred Midas (the Rock Island's agent at Des Moines) not to bother him. This was part of a skit directed by J. M. Haigh, joint agent at Des Moines for the Des Moines Union, the Wabash and the Milwaukee

How to Regain Business Main Concern Of Freight Agents

Many agents think free pick-up-and-delivery service should be abandoned—Barriger says "railroads must learn to merchandise their wares; agents can help"

Concern over the loss of business to the trucks and methods by which some of the traffic might be regained were the prime considerations as about 700 members of the Freight Station Section of the Association of American Railroads met in annual session at Chicago's Congress Hotel, May 15-17. John W. Barriger, president of the Chicago, Indianapolis & Louisville, the only scheduled speaker at the sessions this year, fell right in with the prevailing mood of the agents. Granted that traffic has been lost to the trucks, Mr. Barriger said, in order to regain that traffic the railroads must: (1) improve their relations with the public; and (2) learn to merchandise their wares.

The Task and the Opportunity

There was a time, the Monon president told the agents' opening session, when the railroad's agents were among the major personalities in each community. "It naturally followed that the railway station was then a social center, as well as a depot. The church, the school and the courthouse always have been the basic symbols of American life. There was a time when the railway station had

its place alongside these three great institutions. The demise of the local freight and passenger trains, which followed after good old Dobbin was turned out to pasture, terminated the railway station's partnership in that firm. To be sure, the station building still remains, and an agent presides over it, but his office is no longer the social and business center of the community. The greatest task and opportunity which now spread out before the American railways is the work of reestablishing the railway station and its agent as respected, well-known and friendly neighbors within the thousands of communities, big and little, which are America."

"If the agents," Mr. Barriger said, "become truly integrated into the social, commercial and business fabrics of their areas, as they once were, and can become again," they then can help the railroads in their programs of merchandising. In order to merchandise properly, Mr. Barriger said, it is necessary for the rail carriers to know what rates and services are being given by the trucks which enable them to take business from the railroads, and how much business these competitors are getting. The carriers are "inadequately informed" on the why, how and how much of traffic diversion, said the Monon's president, and with the agent becoming again the outstanding community figure that he used to be this type of information could be secured at the grass roots.

As the meetings continued it became obvious that almost everyone present felt a concern similar to Mr. Barriger's about the diversion of traffic to the trucks. Everything from courtesy to loss and damage prevention and improved pick-up and delivery service was discussed as a means of improving service and thereby also the railroads' relations with the shipping public.

The committee on station traffic, under the chairmanship of W. G. Miller, agent of the Pennsylvania at Polk



W. L. Ennis, assistant to vice-president of the Milwaukee, left, takes over the chairman's gavel from C. F. Allan, superintendent of station service and weighing of the Canadian National. At right is W. E. Todd, secretary of the section



J. R. Formby, assistant to vice-president of the Southern, takes a bow as new Chairman Ennis introduces the vice-chairman for the next two years. F. G. Love, assistant to vice-president, New York Central, is at left

Street, Chicago, was the first of the standing committees to put its docket before the assembly for consideration. In line with Mr. Barriger's thoughts, the first several papers on this committee's docket gave consideration to factors other than service which would improve the relations of the railroads with their patrons. Courtesy was mentioned as one unfailingly good public relations measure, and J. F. Kohout, agent of the Chicago & North Western at Proviso, Ill., told of the circulars being put out by the Brotherhood of Railway & Steamship Clerks which stressed courtesy, safety and careful handling of freight, which he said indicated that the clerks also recognized the value to the railroads of good public relations. V. D. Elkins, joint agent of the Southern and Gulf, Mobile & Ohio at Birmingham, Ala., suggested that in order to be sure that employees would be courteous to customers, all men seeking employment should be given a "courtesy test" before they signed their application for work.

Continuing the subject of relations with the public, C. P. Blanks, agent of the Southern at Chattanooga, Tenn., (in a paper which was part of the docket) advocated each agent's joining the local Lions, Rotary, Kiwanis, or other service clubs. Here, Mr. Blanks said, one could establish pleasant contacts that would lead to better understandings between businessmen and carrier representatives.

Tariff Simplification

Practically all of the rest of the three-day session was devoted to some phase of providing better service, including loss and damage prevention, pick-up and delivery service, stop-off cars, l.c.l. service in general, and simplification of tariffs. The latter subject, particularly the failure of railroad traffic departments to accomplish much in the way of tariff simplification, has been a matter for criticism by the agents for years. At this session, however, the Freight Agents Association of Chicago—one of the bitterest and most persistent of the critical groups of local agents—saw some hope for simplification, mentioning specifically the program of the National Industrial Traffic League and the territorial groups of railroad chief traffic officers. The Chicago agents asked that the section endorse these efforts and that all members having suggestions of a constructive nature submit them to the proper parties.

Prevention of loss and damage was recognized not

only as a means of earning money for the railroads, but also one of the ways to keep patrons satisfied. A. E. Ward, agent of the Milwaukee road at Galewood (Chicago), Ill., chairman of the Committee on Loss and Damage, asked Lewis Pilcher, executive vice-chairman of the A.A.R.'s Freight Claim Division, how the railroads were doing prevention-wise. Mr. Pilcher told of the improvement of the 1950 claim ratio over that of 1949, especially that of l.c.l. freight. (In 1949 l.c.l. loss and damage was 22.2 per cent of the claim bill, while in 1950 it was only 18.4 per cent.) He attributed the more favorable figures for loss and damage to l.c.l. directly to the good work of the agents. He suggested that a little more attention to carload loss and damage might prove equally salutary in its effect. J. H. Aydelott, vice-president, Operations and Maintenance, of the A. A. R., also was called upon for a few remarks by Mr. Ward. Mr. Aydelott, too, recognized the agent as an important factor in the loss and damage prevention program. He urged them to make spot checks on their p.u. & d. contractors' handling of l.c.l., for, he said, many a claim has resulted from a truck driver's throwing the freight onto or off the truck.

Loss and Damage

As if their writers had anticipated Mr. Pilcher's remarks, most of the papers on the loss and damage committee's docket concerned mishaps to carload freight. Loading rules came in for discussion both from the floor and in the papers on the docket. The suggestion was made from the floor that the recommended loading methods contained in the pamphlets of the Freight Loading and Container Section be made mandatory, just as are those of the Mechanical Division. It was suggested also in a paper by the Freight Agents' Association of Kansas City, that the railroads could provide a more damage-free service if shippers would give the carriers advance notice of new products going on the market, and also changes in both interior and exterior packaging of items already on the market.

Discussion eventually got around to damage on canned goods. H. G. Austgen, joint agent of the New York Central and Indiana Harbor Belt at Gibson, Ind., told of the success one canned goods shipper had had in preventing damage to such commodities through the use of heavy cardboard dividers between portions of loads of canned goods. The results of this shipping method, Mr. Austgen



Mr. Love, himself a past chairman of the section, presents to his long time friend C. F. Allan a scroll commemorating his service to the section. W. E. Todd at right

said, had been "marvelous" and both the shipper and the carriers had been very much pleased with them.

Loss and damage to l.c.l. also came in for some discussion. Mainly this was confined to the subject of interchanging bulkheads between roads. Local freight agents associations from New York and Dayton, Ohio, suggested that more bulkheads be used in interline cars and that a non-revenue or astray waybill be made to accompany each car. If the agent receiving the bulkhead should send it to the owning road at other than the station to which the bulkhead is assigned, he should make out the waybill, as above, but send a copy to the agent at the "owning" station, they urged. The agents then asked that the committee of direction take up with the proper authorities the quick adoption of some such uniform method of handling bulkheads on non-revenue billing, in order to encourage their use in interline service.

For Better L.C.L. Service

Not only did l.c.l. draw comment in the loss and damage meeting, but there was plenty of discussion in other sessions. Pick-up and delivery service in particular came in for a lot of criticism, and although there were numerous suggestions as to how best to improve this service, a show of hands made it clear that most of those present favored the abandonment of free pick-up and delivery service. Nevertheless, several of those present from the Southern Pacific lines, particularly R. L. Burk, agent at San Francisco, and A. H. Nasher, merchandise inspector at Los Angeles, told of how pick-up and delivery improvements, coupled with coordinated over-the-road truck service, had brought increased traffic while the trend of l.c.l. on the railroads as a whole had been downward. Mr. Burk said that at San Francisco, since the S.P. had begun the use of its own trucks in p. & d. service, practically all calls for pick-up were handled the same day, and the S.P.'s outbound business at his station had increased by about 150 tons per day.

The suggestion was offered that possibly the railroads should give up handling l.c.l. traffic, as well as stop-off cars. Mr. Nasher made it clear that the S.P. wanted the l.c.l. business, while S. E. McMaster, agent of the Pennsylvania at Philadelphia, said that if the railroads kept giving traffic away they soon would have none. (Most of the agents seemed to agree with Mr. McMaster, for many made it clear that l.c.l. was valuable if only because l.c.l. made it easier for the roads to get a "shot" at valuable carload traffic.) Mr. McMasters said further that bonuses

to p. & d. contractors would give them an incentive to solicit business.

During the discussion of the docket of the committee on station and terminal operation, J. F. Kohout, the chairman, (agent, C. & N. W., Proviso, Ill.) asked, in connection with the loss of l.c.l. business, whether high rates or poor service were doing most to enable the trucks to take the cream of the l.c.l. traffic. There was discussion pro and con but, in general, opinion was that rates were perhaps the major factor, in a majority of cases. Since the railroads get the "balloon" freight while the trucks get the cream, one agent suggested that the minimum charges on the good freight be dropped and that on the low density freight they be increased.

In handling l.c.l. freight (at stations) there was discussion of the effect of mechanization on lowering the cost of handling. A. E. Ward, agent of the Milwaukee at Galewood, Ill., told of the lowered costs at his station resulting from the installation of an overhead chain conveyor. J. A. Robasso, joint agent for the Spokane, Portland & Seattle and Great Northern at Spokane, Wash., said that electric fork-lift machines and pallets at his station had enabled him to more than double production in tons per man per hour. Southern Pacific men present said that not only was mechanization cutting their handling costs, particularly where palletized containers were used, but that these same containers were helping the road to recapture l.c.l. traffic.

Over, Short and Damage

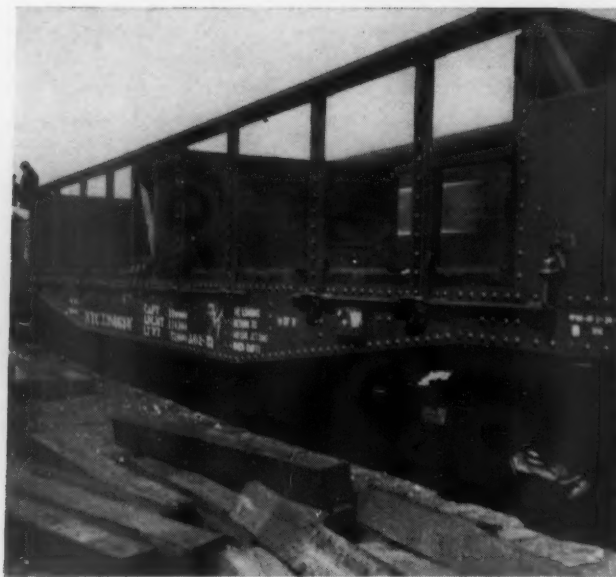
Most of the discussion of the docket of Chairman H. A. Freeman's (agent, Grand Trunk Western, Chicago) committee on station office operation concerned the issuance of over, short and damage reports and movement or slip waybills. The agents of Seattle, Wash., had presented a paper asking that revenue waybills follow by not more than a day those cars moved on slip or movement waybills, while W. P. Radke, agent of the Milwaukee at St. Paul, Minn., in his paper and a talk from the floor emphasized the same thing. It was poor public relations, said Mr. Radke, when a car arrived at destination on a slip waybill and the agent was forced to deliver the car to a cash patron whom he could not advise of the charges applying. Mr. Radke said that sometimes, too, movement waybills would not have all the required information on them, such as consignee, order notify, stop offs, etc., and consequently many days of delay in delivery were experienced, giving the consignee a bad impression and tying up a car which should have been unloaded and on its way with another load of revenue freight.

Also on Mr. Freeman's docket was a paper of the New York freight agents which asked that "not just any guy named Joe" be put on the job of o.s. & d. clerk. They suggested, since so much money might be involved in his observations and reports, that no man "should be detailed to the position of o.s. & d. clerk, loss and damage inspector or exception clerk, without being reasonably instructed."

"Anything that threatens the security of our railroads is reason for caution. We are in a period of national emergency. We need our railroads, need them badly. Probably nothing in the foreseeable future will replace them as effective carriers of the tremendous tonnage that must be transported in time of war . . . Our national defense depends on good railroad service . . . Since railroads are important to our national security we must protect them."—*Montpelier, Ohio, Leader Enterprise.*



The converted container cars make tie unloading easier and safer on the New York Central



Except when ties are being unloaded, the bottoms of the side stakes are fastened in place by locking bars



Ties are pried off of the piles and over the sides of the cars with bars and long-bladed spades



When unloading, the side stakes swing outward, exerting a dragging action on the ties

New Car Design Speeds Tie Distribution

Converted container cars, which are fitted with outward-swinging side stakes, cut crosstie unloading costs on the New York Central

With the introduction to tie-unloading service of 10 cars of special design, the New York Central is cutting the cost of this operation to about one-fifth that incurred in unloading ties from gondola cars. Of equal importance to the railroad is that the use of these new cars speeds up tie unloading to such an extent that not only are interruptions to traffic reduced, but also the section forces have more time to devote to other work.

The 10 tie-unloading cars recently put into service



In a test to determine the effectiveness of the cars ties were unloaded at the rate of 510 per mile

were formerly container cars. In converting them, they were equipped with outward swinging side stakes which permit unloading ties one at a time for continuous distribution while the work train is in motion. Less exertion by the section men is required when unloading from these cars as the ties are pried and pushed out the sides of the car by bars and long-bladed spades, whereas, when unloading from gondola cars, it is necessary to lift the ties over the side.

Each of the cars is divided into two compartments by a transverse bulkhead at the midpoint. The ties are placed longitudinally in two piles in the compartment. Each compartment holds about two and one-half tramloads of ties as used at treating plants. A tramload is approximately 63 main-track or 75 side-track crossties, so the loaded car carries about 250 or 300 ties, depending on the type being handled. On each side of each car, at normal gondola car-side height, there is a top rail from which steel-angle stakes are suspended on hinges. These stakes are held in place at the bottom by locking rods and are so spaced that, when locked, they keep the ties from falling out. The locking arrangement consists of a steel rod bent to fit around the lower ends of two stakes and also to form a handle at one end. The handle is locked in place by a dog and a link. Each pocket is locked separately on both sides of the car; thus ties can be unloaded from either side as desired. Also the stakes are so spaced that the ties can be unloaded from one pile at a time.

Shallow steel skids, fastened transversely to the car deck, facilitate the removal of the sling chain when loading a tramload of ties into the car at the tie yard. The skids also make it easier to slide ties from the bottom tier of the tie pile when unloading.

Labor Costs Reduced

To test the effectiveness of these new work cars, as compared with gondola cars, in reducing the cost of labor for distributing crossties, the road selected a section of track where ties had to be unloaded in connection with a ballasting job that followed a recent rail-laying program. On this track the tie renewals ran

about 510 ties to a mile. When ties were unloaded from gondola cars, the labor cost approximated nine cents per tie, not including the cost of the work train or any other charges that might be applicable to a tie-distribution operation. When the same men were employed a few days later to unload ties from the special tie-unloading cars, the labor cost on the same basis, was less than two cents per tie. Since the ties can be pushed off the cars with hand tools instead of being lifted, as when unloading from gondola cars, there was less hazard of back and hand injuries, and the workmen were less fatigued after the distribution had been completed.

In this test, the ties were distributed in accordance with the normal practice of the N.Y.C. At the time the rail was being laid, when the adzing of the tie-plate seats revealed the true condition of those areas, the track supervisor or his assistant made an inspection of the ties. A count was made of the number of ties that were to be renewed between each pair of telephone poles, and these figures were recorded. This was done so that the correct number of ties within these limits could be unloaded later. Each tenth pole is marked on this railroad so that its position within the mile can be determined.

Prior to the arrival of the ballasting gang, the condition of the crossties was checked again by a walking inspection, and the renewal count was adjusted accordingly. Section forces then unloaded ties from a slowly moving work train. The section foreman took a position between two cars of ties and divided his force half on each car. From his tie-renewal record, the foreman called out or indicated by finger signals the number of ties to be unloaded by each half of his crew as the train moved forward.

Ties Drop Straight Down

In this test it was reported that the special cars proved satisfactory in every way. While the ties are easily pushed past the hinged side stakes, the dragging action of the stakes on the ties prevents them from rolling very far from the ends of the track ties after being dropped from the car. Being hinged at the top the side stakes permit feeding ties one at a time out the side of the car, whereas, if the stakes had been hinged at the bottom, it was believed that difficulty would be experienced in controlling the discharge of ties from the car. The only difficulty encountered by the workmen was at the time that a pocket was first opened, because the top-hinge arrangement for the stakes makes it necessary to push them out almost to a horizontal position when unloading the first ties from a car. This was overcome by lifting the top two ties from the tier nearest to the stakes and dropping them over the side of the car, after which the remaining ties could easily be pried out one at a time.

A. L. Simpson, timber treating engineer, stated that no difficulty was experienced in loading this type of car at the tie yard. While each car holds five tramloads which must be placed into four piles, the splitting of tramloads is also required when loading into gondola cars and hence presents no additional problem.

The tie-unloading cars were designed under the general direction of F. H. Simpson, engineer maintenance of way, Lines West of Buffalo. It is anticipated that, after demonstration tests on other territories of the New York Central have further proved their practicability, additional container cars will be converted into units of this special design.

GENERAL NEWS

Railroad Presidents Urge Favorable I. C. C. Action on Freight-Rate Plea

Sixteen chief executives among carrier witnesses testifying at Washington hearings in the Ex Parte 175 proceeding

Division 2 of the Interstate Commerce Commission concluded on May 22 the Washington, D. C., hearing which began May 14 on the railroads' Ex Parte 175 petition for a freight-rate increase of 15 per cent. This permanent proposal would supplant the interim-relief increase, averaging over-all about 2.4 per cent, which was approved by the commission in its March 12 report in the proceeding.

The carriers' principal presentation in support of the increase was made at the hearings; and it included the testimony of several railroad presidents and other officers. The presentation was under the general direction of E. H. Burgess, vice-president and general counsel of the Baltimore & Ohio.

As members of Division 2, Commission Chairman Splawn and Commissioners Mahaffie and Alldredge were on the bench—part of the time at separate hearings. The procedure of holding three sessions simultaneously was adopted to expedite the proceeding.

As reported in *Railway Age* of May 21, page 168, the first railroad witness was Dr. Julius H. Parmelee, vice-president of the Association of American Railroads and director of the association's Bureau of Railway Economics. He was followed by the railroad-president witnesses, the first of whom was President John P. Kiley of the Chicago, Milwaukee, St. Paul & Pacific.

Mr. Kiley testified that the railroads cannot overcome the "tremendous burden" of increased wages, taxes and material prices, "without obtaining offsetting compensatory charges for the services we perform." He went on to present comparative figures showing how railroad costs have increased "far more" than freight charges since 1940.

"The most important problem now facing the Milwaukee Road and other railroads," Mr. Kiley added, "is the securing of additional revenue to take care of the recent added costs of operation, and the need of providing funds for making improvements." In the latter connection, the Milwaukee president explained that, because of increased costs, "it is not possible to replace road property or equipment out of depreciation reserves."

The Milwaukee, Mr. Kiley continued, "should expend an average of \$15 mil-

lion per year for improvements" during the next four years. That program contemplates annual outlays of \$8,250,000 for 1,500 new freight cars and about \$3,500,000 for new diesel-electric locomotives. Mr. Kiley also mentioned other improvements which he said are under consideration, many of which are "long past due" and which would have been completed if earnings had been such as to permit financing them.

Walter S. Franklin, president of the Pennsylvania, urged favorable commission action—not only because of the cost-revenue relationship, but also to provide for national defense needs, the general public service, and a proper return on railroad investment. "We must restore our earning power," Mr. Franklin said.

Would Earn Only 2%

He predicted that, if freight rates remain at present levels, the P.R.R. this year would earn only \$5.5 million, or "slightly more than 2 per cent on its net investment. Even if the proposed 15 per cent increase were approved, the P.R.R.'s 1951 net income would be "only \$30.6 million," a 3.5 per cent return, Mr. Franklin added.

He also referred to his road's \$586 million equipment improvement program, saying that, because of poor earnings, the program's schedule of heavy repairs to freight cars would be curtailed on June 1 instead of carrying through to the end of July as originally

planned. Low earnings have also forced the P.R.R. to cut back the installation of new rail in track maintenance, Mr. Franklin continued. He added, however, that the road is nevertheless planning improvement expenditures of "close to \$125 million per year" for the next five years; and he feels that it can "go forward into a very good period if we can get these wage situations and these costs of materials once straightened out."

President C. McD. Davis of the Atlantic Coast Line reported that an annual saving on his road of \$7,685,000 in transportation expenses in 1950 as compared with 1948 was not enough to offset increasing wages and other costs. He put at \$8.5 million a year the increase in the A.C.L.'s wage bill since the beginning of 1951; and he estimated that this year's costs of materials will be \$4.9 million above the July 1, 1949, level.

May Net \$5.3 Million

His road's prospective net railway operating income for 1951 is now \$5.3 million, which would be a return on net investment of 1.32 per cent, Mr. Davis said. He added that the 15 per cent rate increase would produce a return equivalent to only 2.41 per cent. As to the Coast Line's improvement program, Mr. Davis said it contemplates a 1951 outlay of \$58 million and total expenditures of about \$111 million for the five years, 1951-1955. But "adequate earnings" will be necessary, Mr. Davis warned.

President Robert S. Macfarlane of the Northern Pacific told the commission that his road paid a \$2 per share dividend on its stock in 1950, when it handled "substantially" more traffic

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than in 1928, a year in which a \$5 dividend was paid. The N.P. president also pointed out that his road's wage and materials costs have "more than doubled" since 1938, while the general level of its freight rates has been increased "only 52 per cent."

Larger Earnings a Must

"It cannot be seriously questioned," Colonel Marfarlane asserted, "that if railroad properties are to be adequate to meet the growing transportation needs of the commerce of the country and the national defense, earnings must be adequate, either to attract venture capital to provide necessary funds for improvements and enlargements of plant capacity, or to enable the company to make necessary capital expenditures out of earnings after meeting fixed charges and paying reasonable dividends to the owners of its equity securities."

President Gustav Metzman of the New York Central said that his road's wage bill has increased more than \$4 million a month as compared with last year, but the interim-relief increase is yielding only about \$1.3 million a month. Colonel Metzman put at \$63 million a year the outlay required to buy diesel-electric locomotives and freight cars which the Central will need during the next few years.

"In addition, if we are to keep pace," he added, "we should buy other equipment such as commutation cars, head-end cars, marine equipment, and maintenance-of-way work equipment. Altogether, our capital expenditures for equipment should be in the neighborhood of \$74 million per year over the next five years."

The N.Y.C. president went on to emphasize his view that the railroads "must have reasonably good earnings" if they are to continue "as a prosperous,

progressive, expanding industry." And Colonel Metzman, as he put it, meant "earnings high enough to enable them to pay dividends, reduce debt and make the type of capital expenditures that will meet industrial requirements and improve service to the public." He also asserted that "common prudence would seem to require that earnings in these times should be high enough to insure transportation capacity that will enable the railroads to meet national emergencies."

President John E. Tilford of the Louisville & Nashville said the proposed increase would make his road's return on net investment "only 5.6 per cent," which he called "only a reasonable and necessary earning."

"If a substantial railroad like the L.&N., with its well-diversified traffic and conservative management policies, cannot earn that much in a time like this, of high industrial productivity and when national leaders are calling on it for huge capital outlays in the interest of national security, the future outlook for the railroads in this country is indeed bleak," Mr. Tilford also said. He went on to point out that the L.&N. spent more than \$125 million for capital improvements in the past five years; and that its 1951 program calls for outlays totaling \$73 million.

The B. & O.'s Situation

President Roy B. White of the Baltimore & Ohio said that the 1951 savings of \$30 million which that road will realize as a result of dieselization would be wiped out by increases in expenses in this and subsequent years. A recent study indicated that the B.&O. should spend about \$53 million this year for road and equipment improvement, Colonel White also said. He added that the road's 1951 capital-improvement budget, based on esti-

mated earnings, would provide only \$23 million—"less than one-half of what is needed."

The study also indicated that B.&O. capital expenditures in the 1951-55 period should total about \$215.8 million, an average of \$54 million a year. "If the full 15 per cent increase in rates applied for is authorized, there would be insufficient funds to take care of this capital improvement program," Colonel White added. He also referred to deferred maintenance which accumulated on the B.&O. as a result of materials and manpower shortages of the World War II period. It will take \$59 million to catch up, Colonel White estimated.

Mr. Neff Testifies

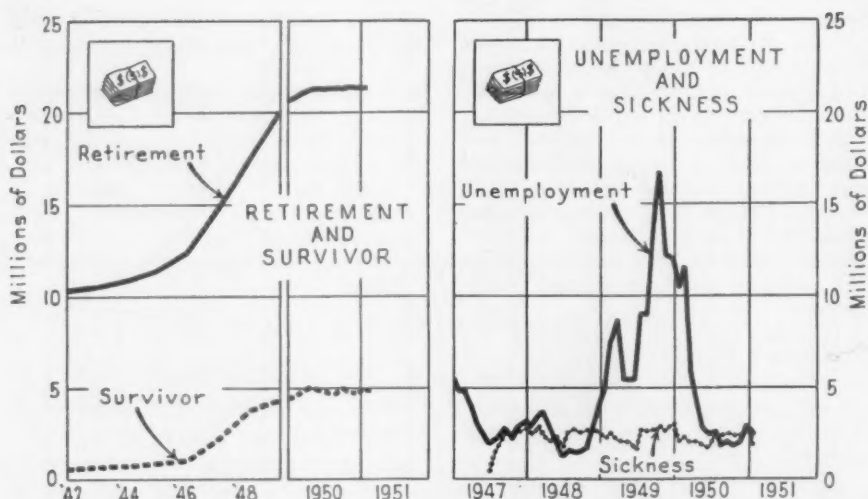
The Missouri Pacific's chief executive officer, P. J. Neff, testified that this road did not earn a fair return from 1930 to 1950, inclusive. Meanwhile, however, Mr. Neff continued, the M.P. "must have been very important to the national security," since the government "found our lines so strategically located and our service so necessary that in the last war they located 130 training bases, war plants, storage depots, air fields, etc., at points served exclusively by the Missouri Pacific and another 67 similar facilities at points served by the Missouri Pacific and other lines."

These plants "may again become the fountainhead of a large part of the most important war supplies," Mr. Neff added. And he went on to say that the M.P. can only look to the commission to "see that there are sufficient earnings" to do its part of the job. Mr. Neff also said it is "unfortunate at the present time that we continue to talk in terms of 6 per cent as a fair return on the railroads' property to cover interest on borrowed capital, replace-

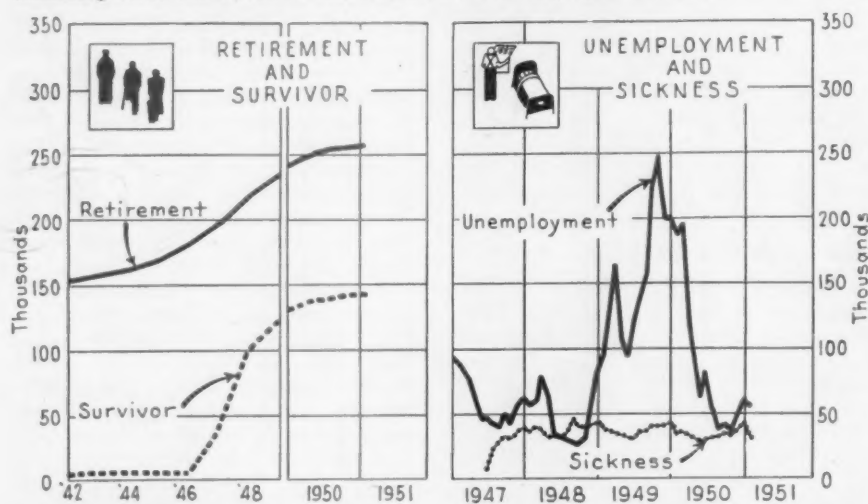


FROM ALL OVER THE UNITED STATES AND CANADA, more than 100 officials of the Canadian Pacific's freight department gathered recently at the Chateau Frontenac, Quebec, Que., for a three-day discussion on freight problems. This group picture shows in the first row, seated, left to right: Walter W. Kremer, of Minneapolis, Minn., vice-president of the Soo Line; A. B. Burpee, Winnipeg, Man., superintendent of transportation; H. W. Gillis, Montreal, Que.,

freight traffic manager; A. C. Stenberg, Marquette, Mich., general traffic manager of the Duluth, South Shore & Atlantic; C. E. Jefferson, Montreal, vice-president of traffic; W. A. Mather, Montreal, president of the C. P.; George F. Buckingham, Montreal, general traffic manager; G. Hiam, Montreal, general freight traffic manager; George C. Dow, Montreal, foreign freight traffic manager; and F. K. Hollyman, Montreal, assistant general freight traffic manager



BENEFIT PAYMENTS by the Railroad Retirement Board during the year 1950 as compared with those of years immediately preceding are shown on this chart, based on the annual report of the board. Note how the impact of military traffic stemming from the Korean crisis has affected unemployment totals



THE NUMBER OF BENEFICIARIES for each of the four types of benefits—retirement, survivor, unemployment and sickness—aided by the board in 1950 as compared to previous "post-war" years. Again, the balance between unemployment and war-time traffic is clearly evident

ment of cars, locomotives and many facilities which were constructed at a time when the cost was on the average 50 per cent of what it is at present, to say nothing of any return to the stockholders."

President Arthur K. Atkinson of the Wabash said that revenues from the proposed increase would merely return the railroads to their 1950 financial position or thereabouts. It would make the Wabash's 1951 return on net investment 4.99 per cent as compared with 5.16 per cent last year.

As to contentions that increased traffic would bring higher earnings, Mr. Atkinson had figures indicating that the required revenues cannot be expected from that source alone. He also referred to the Wabash's improvement program which contemplates expenditures totaling \$24.6 million, including about \$21 million for new diesel-electric locomotives, new freight cars, and rearrangement and enlargement of tracks and sidings.

President William White of the Delaware, Lackawanna & Western stressed the proposition that, during a period of good business volume, profits should be high enough to offset the low earnings of years in which business is poor. It was Mr. White's view that the increases sought would be "inadequate for the great rank and file of railroads," including the Lackawanna.

"If a company at the start is earning a fair return," he said, "it can be kept in that condition by matching increased costs with increased revenues, but most of the roads were earning nowhere near a fair return before the cost increases to which they have been subjected. Therefore, merely matching increased costs is in fact wholly inadequate."

Mr. White put at "between \$50 million and \$60 million" the expenditures contemplated in the Lackawanna's improvement program. "But only a period of satisfactory profit will permit the

carrying out of this program," he added.

President Paul W. Johnston of the Erie asserted that he could think of "no greater or more inexcusable tragedy for this country than to find itself in war with its railroads weak and undernourished." Prospective earnings must provide the framework within which plans for further modernization and improvements must be fitted, Mr. Johnston declared.

He went on to say that the Erie plans capital expenditures totaling \$27,935,647 this year and has programmed more than \$95 million in additional expenditures for the 1952-55 period. Whether this program will be carried out "depends upon earnings of the railroad," Mr. Johnston added. Since the end of World War II, he continued, the Erie has made capital expenditures totaling \$114 million, making itself "almost 80 per cent dieselized." Despite the resultant economies, the Erie's 1950 rate of return was "only 5.07 per cent," its president said.

Stresses Higher Taxes

President R. W. Brown of the Reading stressed the fact that wages and payroll taxes have increased to the point where they are taking more than 58 cents out of his roads revenue dollar, as compared with 53.4 cents in 1950. Like other presidents, Mr. Brown discussed the need for earnings sufficient to support current capital-expenditures programs. Earnings on such a basis are "absolutely essential," he said.

The Reading president also told of the "serious loss" of revenue which results from the lag between the time wage increases become effective and the date when offsetting rate increases can be made effective. In the present case, he said, the railroads are still endeavoring to make effective increases in rates intended to offset wage increases which are retroactive to October 1, 1950, for some employees, to February 1 for others, and for the "escalator-clause" increases on April 1.

President R. L. Williams of the Chicago & North Western presented data with respect to that road to point up what he called the "alarming disparity between income and expense items." The figures showed that the decade ending with 1950 brought increases of more than 100 per cent in expenses while the revenue per ton-mile increased only 23.6 per cent and revenue per passenger-mile 21 per cent.

Mr. Williams also referred to the rates on iron ore moving to upper Great Lakes ports, which have been excluded by the commission from several of the general rate increases of recent years. As a result of those commission determinations, Mr. Williams continued, those rates have been contributing less than other rates toward meeting transportation costs, having risen only 14.2 per cent while rates on the same ore moving from the lower lake ports to steel mills have increased

56.68 per cent. He added that any withholding of Ex Parte 175 increases from rates on ore to the upper lake ports would "seriously aggravate the discriminatory and inequitable situation in which the North Western and other roads find themselves with respect to those rates."

President Earl T. Moore of the Central of New Jersey reported that his road's net railway operating income in 1951 would be only about \$2.6 million, as compared with 1950's \$5.8 million—despite an increase of about 6 per cent in freight traffic. On that basis the 1951 return would be 1.55 per cent, which Mr. Moore called "low earnings" at a time when the Jersey Central, like other roads, is carrying out an "extensive" capital improvement program.

Expenditures under that program totaled \$36 million during the 1940-49 period. Mr. Moore said, adding that annual outlays of \$10 million are planned for the next five years. Thus he said it was "extremely important" to his road that the increases sought be granted "promptly."

Return Should Average 6%

President C. A. Major of the Lehigh Valley spoke of the need for funds to pay dividends as well as to maintain improvement programs. The dividend situation has often been overlooked, Mr. Major said, adding that a return to the people who invested their money in railroad properties was an important matter.

The L. V. president went on to say that the railroad industry should have earnings which would be equivalent to an average annual return of 6 per cent. He explained that this meant that the return should be higher than 6 per cent in good business years.

President Wayne A. Johnston of the Illinois Central said that the 1951 rate of return for his road now looked like "only 3.57 per cent," and that it would become "only 5.95 per cent" if the proposed increase were granted. Mr. Johnston also referred to the I.C.'s improvement program which calls for expenditures totaling \$152.5 million from 1951 through 1955.

He said that improvements planned are "urgently needed for efficient and economical operation." At the same time, he asserted that it would be impossible to carry out the program with earnings no higher than those now in prospect.

The presidents' testimony was supplemented by that of various other railroad executives, including traffic, operating and accounting officers. Also appearing on behalf of the railroads was Dr. Jules Backman, professor of economics at New York University. Other proceedings of the hearings included cross-examination of the railroad witnesses by counsel for various parties, including the several government agencies opposing the increase.

At the closing session of May 22, witnesses for two of the government agencies offered testimony and exhibits

designed to show generally that Dr. Parmelee's estimates of future traffic were on the pessimistic side. These witnesses were James H. Noble of the General Services Administration and Louis H. Bean of the Department of Agriculture.

As the hearings closed, Commission Chairman Splawn announced that there would be a further notice as to the oral argument and whether briefs will be received. As to the latter, Dr. Splawn went on to say that, "as of the moment," the commission was "inclined" to receive briefs on the opening day of the oral argument—so written statements could be submitted by parties not desiring to be represented at the argument.

Oral argument is now scheduled to follow immediately after the close of another series of Washington hearings which will open June 25. Next proceedings in the case will be regional hearings which get under way June 5 at Portland, Ore. (*Railway Age* of May 21, page 173.) Meanwhile, the commission has received for the record in the case 140 verified statements from representatives of the railroads and other parties.

Cut In Freight Car Program Expected

Third-quarter allocations are now set at 672,000 tons

Steel allocations for the third quarter freight car program are expected to reduce production below the 10,000-a-month level, perhaps cutting it as low as 7,600 cars monthly for the period.

A tentative program approved by the Defense Production Administration has set the total steel allocation at 672,000 tons. This tonnage, according to Defense Transport Administrator James K. Knudson, would provide for a maximum production of about 24,000 new cars or a minimum of 21,000. D.T.A. had requested steel for 30,000 cars.

There were indications, however,

that "some little improvement" might be forthcoming when the final figures are released. The D.P.A. had the matter under advisement following a May 18 conference in which car builders, government officials, shippers, and the Association of American Railroads met in a four-hour closed conference with several members of the Senate.

That session was called by Senator Johnson, Democrat of Colorado and chairman of the Senate Interstate and Foreign Commerce Committee. It was what he called a "round-robin affair" designed to "develop the facts" on the freight car program.

At a press conference following the meeting, Senator Johnson said freight car production in the third quarter would be "about 7,600 cars a month." He said this poses a "very serious" problem, since there are already large car shortages, and indicated the "next move" will be "consideration of the matter by the Senate Interstate Committee."

Among those attending the meeting was Karl R. Bendetsen, assistant secretary of the army and present head of the nation's railroads. He told the group the Department of Defense feels that production of 10,000 cars a month is the "minimum" necessary for the defense effort.

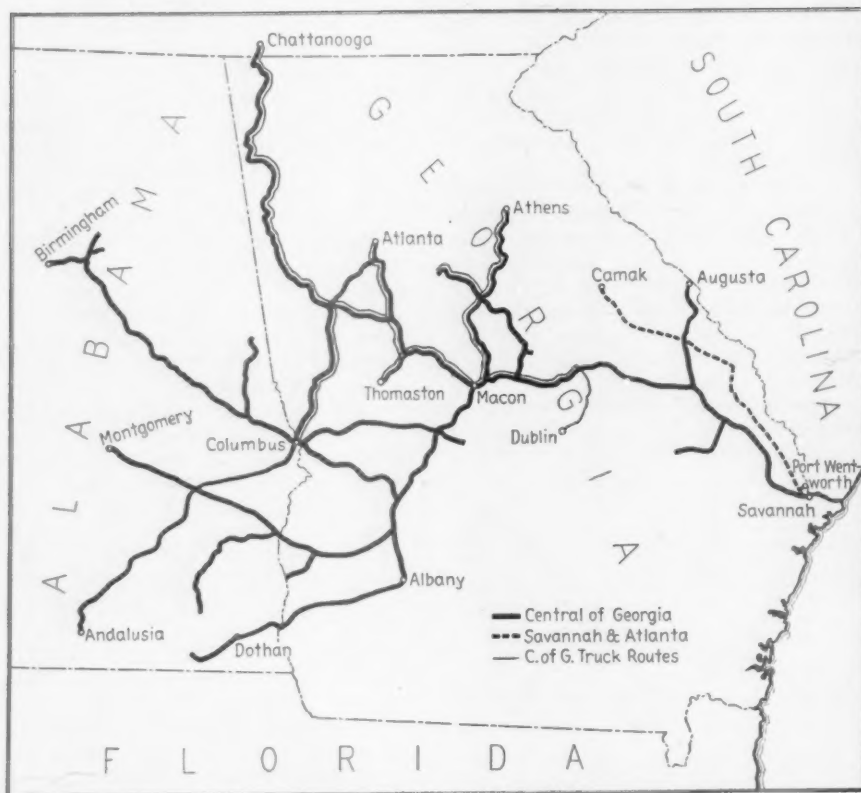
Charles E. Wampler, head of D.P.A.'s Program and Requirements Division and the man who passes on the freight car steel allocations, defended the proposed cuts in the program. According to Senator Johnson, Mr. Wampler explained it as "just a matter of dividing available steel among the many claimants."

(This view has been expressed before by D.P.A. Edwin T. Gibson, acting administrator of the agency, recently told the Senate Banking Committee that trying to balance the supply of steel with the civilian and defense requirements is going to cause "a number of disappointments, there is no question about it." He was, at the moment, discussing the freight car allocations program with Senator Bricker, Republican of Ohio.)

Following the May 18 conference, Senator Johnson also released a statement presented at the meeting by Administrator Knudson of D.T.A. In this



THE BOX CAR—A NEW AD MEDIUM? — A "carload" of publicity for a new refrigerator was gained by a North Chicago (Ill.) manufacturing concern when it secured this 40-ft. banner to the side of the car carrying the first shipment to a Detroit (Mich.) distributor



VALUABLE PORT FACILITIES at Port Wentz and a possible alternate route from Savannah to Augusta are among the advantages which the Central of Georgia stands to gain from control of the Savannah & Atlanta, as recently authorized by Division 4 of

the Interstate Commerce Commission (*Railway Age*, May 21, page 183). This map shows the relative location of C. of G. and S. & A. lines and also the rail-coordinated truck routes for l.c.l. freight recently established by the Central of Georgia

Mr. Knudson showed, among other things, the steel tonnages requested by D.T.A. for the third quarter and the amounts tentatively allocated by the National Production Authority to meet these requirements.

According to these figures, D.T.A. asked for 122,200 tons of steel for new locomotives, 613,900 tons for new freight cars, and 1,645 tons for passenger cars. N.P.A. cut the locomotive figure to 93,000 tons, reduced the freight car tonnage to 457,500 tons, and eliminated the passenger car tonnage altogether.

As to steel allocations for maintenance, repair and operation ("MRO"), the figures showed D.T.A. asked for a total of 1,050,822 tons. This included 252,840 tons for freight cars, 104,325 for locomotives and other maintenance, and 693,657 for rail and accessories.

N.P.A. allocated 109,200 tons for freight car "MRO." Another 105,300 tons were provided to meet "MRO" requirements of car builders and component parts manufacturers. And 730,000 tons were allocated for locomotives, rail and other "MRO" programs.

Senator Johnson said that other persons attending the "round-robin" session included William T. Faricy, president of the A.A.R., J. M. Hood, president of the American Short Line Railroad Association, P. A. Hollar, deputy under secretary of commerce for trans-

portation, and Robert W. Glenn, chief of the Transportation Equipment Division, N.P.A.

Frank J. Armstrong, president of the National Association of Shippers Advisory Boards, Frank G. Moore for the National Industrial Traffic League, and E. L. Peterson of the Minneapolis Traffic Association represented shippers at the meeting.

Champ Carry, board chairman, and Stephen T. Early, vice-president, Pullman-Standard Car Manufacturing Company, were among the car builders present, Senator Johnson said.

R.R. Police Urged To Hold Good Will

"Because of the very nature of your work, much of what you do for the welfare of the traveling and shipping public remains unknown to them. This is unfortunate. But you may be sure that railroad executives recognize your organization as one of the most important elements of railroad public relations."

Thus did J. W. Corbett, vice-president (operations) of the Southern Pacific, set a keynote for the 31st annual meeting of the Protective Section of the Association of American Railroads, held at San Francisco, May 8-10.

Mr. Corbett's words were echoed

by H. C. Munson, vice-president and general manager of the Western Pacific, when, speaking of the importance of maintaining friendly relations with the general public, he said: "You have opportunities [to see the benefit of goodwill] when arranging with city, county, state and federal authorities to detour traffic on streets and highways. If you have maintained good relations with these people, you can accomplish many things that you cannot accomplish if the relationship was poor."

Both men told members of the section that the means by which railroad police officers deal with railroad fans and others interested in the industry could tap considerable ill feeling or it could build further friendship for the railroads. Mr. Corbett termed the question "a particularly delicate issue" because of certain restrictions made necessary by the outbreak of war in Korea. "Your departments," he said, "have done an outstanding job of public relations in prohibiting restricted pictures and yet keeping the friendship of these people for the railroads. The importance of this can hardly be over-emphasized, for the railroads' very livelihood depends on their friendly relations with people. A mishandled case can bring us adverse reaction, but common sense in deciding on an infraction—particularly by children—can result in invaluable good will for all of us."

Loss Claims Cut 33%

A. L. Green, special representative of the A.A.R.'s Freight Claim Division, lauded the work of the section in bringing about a sharp reduction in freight claims for loss of property. "Last year's achievement of the Protective Section, in effecting a reduction of 33 per cent in the total amount of claims paid by railroads of the United States and Canada for freight lost or stolen probably was unexcelled by any previous performance," he said. "Such a great improvement in safeguarding freight against loss, despite largely increased commodity values, was all the more creditable." Part of the quality of protection which railroad police and special service departments have affected results, he said, "because throughout the entire railroad industry, you function as a single police organization. This sense of responsibility to the industry, rather than solely to your own company is now more generally accepted, and quite likely contributes more to the common good than any of us realize."

In concluding his talk, Mr. Green warned that "a large increase in claim expense is well on its way. More claims always come along with more traffic—and at least seven per cent more ton-miles of business is expected for this year. The prevention job is becoming more difficult for the railroads are losing experienced men to the draft. And, on the average, every

claim paid on traffic moving after February 1 of this year will run 20 per cent higher than it did in February of 1950 because of the large increase in commodity prices."

The meeting was attended by 76 members of the section—exactly the same number that had attended the previous meeting in Boston last year. Guests and others swelled the attendance figure to about 125.

Elected to head the section for the coming year were: H. G. Moxham, chief of police, Boston & Maine, chairman, and E. S. Glass, chief special agent, Norfolk & Western, vice-chairman. The retiring chairman was W. G. Fetzner, chief special agent, Chicago, Burlington & Quincy.

"Favoritism" in Locomotive Steel Program Is Charged

Charges that one locomotive builder received steel allotments from the National Production Authority, while four other builders were given the run-around, were made to a House committee last week.

William G. Knight, an official in N.P.A.'s Iron and Steel Division approved a "directive" guaranteeing steel for General Motors Corporation. Meanwhile, applications for relief by other locomotive builders were "lost" twice.

The other builders were American Locomotive Company, General Electric, Baldwin-Lima-Hamilton Corporation, and Fairbanks, Morse & Co., Mr. Knight said.

These events, according to Mr. Knight, occurred in March and April. At that time, he said, N.P.A. knew the supply of locomotive spare parts was down "to a dangerous point," and after discussions with the builders it was decided to recommend they be given DO-97 ratings to provide steel for maintenance, repair and operation. These recommendations were prepared and forwarded up through channels by the Transportation Equipment Division.

Mr. Knight stated that out of these recommendations, higher-ups in N.P.A. approved a "directive" providing specific tonnages of steel for General Motors only. Recommendations for the other builders were "lost" and had to be resubmitted, Mr. Knight said. Then the resubmissions were "lost," he said.

Mr. Knight was testifying under subpoena before the Monopoly subcommittee of the House Judiciary Committee. Representative Celler, Democrat of New York, presided at the hearings.

At the close of the session it was announced that subsequent hearings would be held to permit witnesses from the Iron and Steel Division to tell their side of the story. Among those named to appear later were Merwin W. Cole, director of the division, and Henry P. Rankin Jr., a section chief of the division. Both Mr. Cole and Mr. Rankin signed the General Motors "directive," Mr. Knight said.

GENERAL MOTORS DENIES IT GOT PREFERENCE

"Statements to the effect that the Electro-Motive Division of General Motors has received preferential treatment from the Steel Division of N.P.A. in the allocation of steel for its diesel locomotive manufacture are completely at variance with the facts," the General Motors Corporation said in a May 23 statement. As the statement put it, "the facts are" that G.M. "is being discriminated against rather than being favored."

The latter assertion was based on contentions that G.M. "has actually received a substantially smaller proportion of the material allocations to the locomotive industry since allocations of steel became effective May 1 than it was entitled to based on the historical record of its participation in the locomotive industry." General Motors regards the locomotive industry's production record for the first six months of 1950 as the proper "historical record" for allocations, and it cited an N.P.A. statement to the effect that such a basis would give G.M. 65 per cent of the materials allocated to the industry for this year's third quarter.

The cited N.P.A. statement was part of that agency's undertaking to explain why it had not based the third-quarter allocation on the first-half-of-1950 pattern. After noting that the allocations were based on operations of the 1948-1950 period, the N.P.A. statement went on to say that the first half of 1950, "which is frequently used as a base period," was rejected because locomotive production in that period "did not follow the historical pattern." To have used the first half of 1950, N.P.A. added, "would have given one company 65 per cent of the materials allocated."

Mr. Knight also told the subcommittee he was testifying over the "considerable" objection of certain N.P.A. officials. He said Robert W. Glenn, the Transportation Division director, was among those "reluctant" to have him testify, and he quoted Mr. Glenn as saying he was afraid "somebody might get his fingers scorched."

On the basis of the testimony from Mr. Knight, Chairman Celler promised that his group would look "very deeply" into the matter. He told Mr. Knight that if there were "reprisals" for his appearance before the subcommittee, then "let us know immediately."

During the hearing it was brought out that Mr. Rankin is serving with N.P.A. as a "W.O.C. man"—without compensation. He is on leave from his job with Republic Steel Corporation where he is assistant sales manager. Mr. Cole is also a W.O.C. man, on leave from Bethlehem Steel Company.

Representative Celler identified Republic as having recently borrowed \$40,000,000 from General Motors. He said he understood this to be a part of

Republic's \$250,000,000 expansion program.

Mr. Knight testified that the "directive" providing MRO steel for G.M. was returned to his section from Mr. Rankin's office. He said the "directive" was not the same document that had originated in the Transportation Division, although the amount of steel it provided was the same as that recommended.

E. R. Wisner and James T. Morrison, both with Baldwin-Lima-Hamilton, backed Mr. Knight's story to the subcommittee. They said their plants "very definitely" lost production as a result of their failure to obtain critical materials. They also told how they spent time at N.P.A., going from office to office, without being able to find the "lost" recommendations for their firm.

Long-Haul Trucking Probe Again Refused by I.C.C.

The Interstate Commerce Commission has again denied a request by the railroads calling for a general investigation of "long-haul" trucking. The roads had asked the commission to reconsider its February 5 order denying their earlier plea for such an investigation. (*Railway Age*, February 19, page 33.)

In turning down the second request by the roads, the commission said the situation "has not changed" since the previous order was issued. At that time the commission indicated it did not have the money or personnel to conduct such an investigation.

Meanwhile, there has been an appeal to the courts from a commission decision which reflected the regulatory body's concern about the impact of long-haul trucking on the railroads' ability to maintain essential services and facilities. The decision denied an application of Pacific Intermountain Express Company for authority to acquire Keeshin Freight Lines and thus establish a new transcontinental trucking system. (*Railway Age*, November 18, 1950, page 63, and April 16, page 51.) The appeal to the courts is embodied in a complaint filed by P.I.E. in the United States District Court at San Francisco.

Social Security Tie Held Costly to Rail Retirement

A spokesman for the Social Security Administration has declared that "coordination" of railroad retirement with social security would actually cost the former about 0.7 per cent of the railroad payroll annually. He said partial merger of the two systems, as is advocated by the "non-ops" in the bill S. 1347, would thus cost railroad retirement, rather than yield additional revenue as indicated in Railroad Retirement Board estimates.

This opinion was expressed by Robert J. Myers, chief actuary of the Social Security Administration, at

hearings before a Senate subcommittee studying proposed changes in the Railroad Retirement Act. S. 1347 is among the bills before the subcommittee. It proposes, among other things, that employees with less than 10 years service have such service credited under the Social Security Act. (*Railway Age*, May 21, page 170.)

Senator Douglas, Democrat of Illinois, presided at the hearings which have now been concluded. Similar hearings have since gotten under way before the House Interstate and Foreign Commerce Committee, where companion bills to those in the Senate are being studied.

As the hearings on the Senate side concluded, the subcommittee heard rebuttal statements from proponents of the various bills. G. E. Leighty, chairman of the Railway Labor Executives' Association, and Lester P. Schoene, R.L.E.A. general counsel, made a further presentation supporting the "non-op" bill.

Clifford D. O'Brien, counsel for the operating brotherhoods, urged the subcommittee to report favorably the "op" bill, S. 1353. He said the "non-op" bill, S. 1347, is "plainly not the answer" to the problem of integration of railroad retirement with social security. He asked, however, that a "serious and thorough study" of such integration be undertaken.

While this study is under way, retirement benefits should be increased by 16 2/3 per cent or a flat one-sixth, Mr. O'Brien said. At the beginning

of the hearings the "ops" had asked for a 25 per cent increase.

J. Carter Fort, vice-president and general counsel of the Association of American Railroads, told the subcommittee he found himself in agreement with "many things" set out by Mr. O'Brien. He went on to say he did not agree with the proposal for increasing present benefits 16 2/3 per cent. At earlier hearings Mr. Fort had expressed the railroad position as opposing increased benefits because no funds are available in the system to pay for them.

Thomas Stack, president of the National Railroad Pension Forum, also appeared and declared that there is "no demand" from employees for the type of bill entered by the "non-ops." He called S. 1347 "a very vicious piece" of legislation.

Eight Killed, 63 Injured, in Wreck at Bryn Mawr, Pa.

Seven men, including a Pullman porter, and one woman, were killed and 63 persons injured in a rear-end collision between the Pennsylvania's "Red Arrow" and its "Philadelphia Night Express" at Bryn Mawr, Pa., about 6:38 a.m. Eastern Standard Time on May 18.

The latter train, No. 36, eastbound from Pittsburgh to Philadelphia on the eastbound express track of the railroad's four-track main line, had stopped in response to signals which had been

activated by a dragging equipment detector. The following "Red Arrow," No. 68, eastbound from Detroit to New York on the same track, had apparently stopped as required at the automatic block signal next behind and protecting the "Night Express," but then failed to make a second stop short of the train itself.

The Pullman roomette car "Poplar Vale," on the rear end of the "Night Express," was virtually demolished by the impact, while the preceding car, "Cascade Chasm," was derailed, as were the locomotive and first two cars of the "Red Arrow"—which were, respectively, dormitory and baggage units. All the deaths occurred in the "Poplar Vale" and most of the more serious injuries in the "Cascade Chasm," both of which had been picked by the "Night Express" from the "Clevelander" at Harrisburg, Pa.

The accident, which occurred just east of Roberts road overpass near the boundary between Bryn Mawr and Rosemont, is being investigated by the railroad, the Interstate Commerce Commission, the Pennsylvania Public Utility Commission and local authorities. The I.C.C. inquiry, docketed as Ex Parte No. 181, began at Philadelphia on May 23 before Commissioner W. J. Patterson and Examiner E. J. Hoy.

Other Investigators

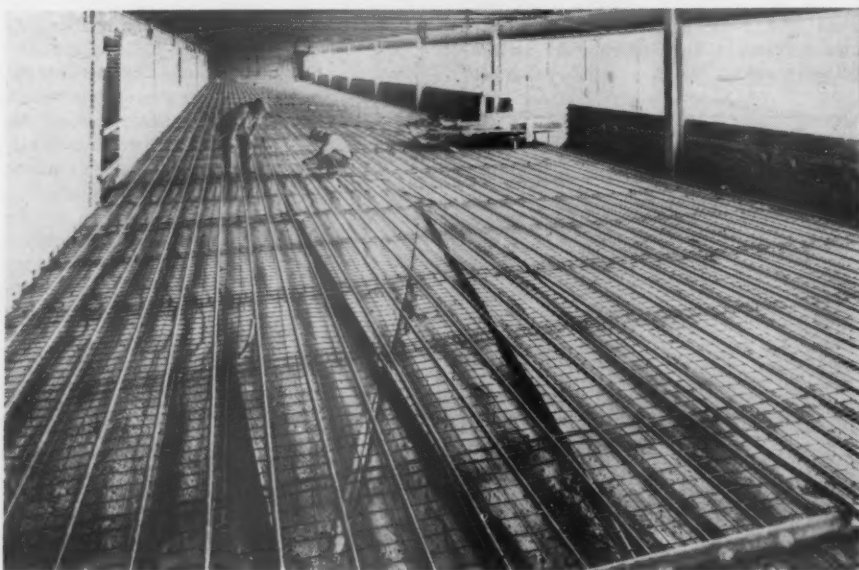
Participating in the investigation were Ray Smith, I.C.C. chief of investigation; George Henderson, I.C.C. chief of signal; and John B. Conly, a member of the Pennsylvania P.U.C. This is said to be the first time the two commissions have held a joint hearing on a passenger-train accident in Pennsylvania.

First witness at the hearing was Joseph S. Gillum, superintendent of the P.R.R.'s Philadelphia Terminal division, who, under questioning by Adelbert S. Schroeder, the road's assistant general counsel, testified that crews of both trains had boarded them at Harrisburg under normal relief procedures.

As this issue of *Railway Age* went to press, the investigators were planning to take testimony from three key figures in the collision who are hospitalized—Francis B. Yentzer and Clarence W. Ward, engineman and fireman, respectively, on the "Red Arrow," and J. M. Monahan, conductor on the "Night Express."

The Pennsylvania's own "tentative and preliminary" statement on the wreck, which was issued on May 18 by J. M. Symes, operating vice-president, after expressing "sincerest sympathy" and promising "every assistance" to the families of the persons killed and to the injured, said:

"Our preliminary investigation shows that apparently the warning signals at the wayside and in the locomotive cab were properly working to warn the 'Red Arrow's' engine crew of the presence of the 'Philadelphia Night Express' on the track ahead. The flagman of the latter train, it is reported, had gone back to

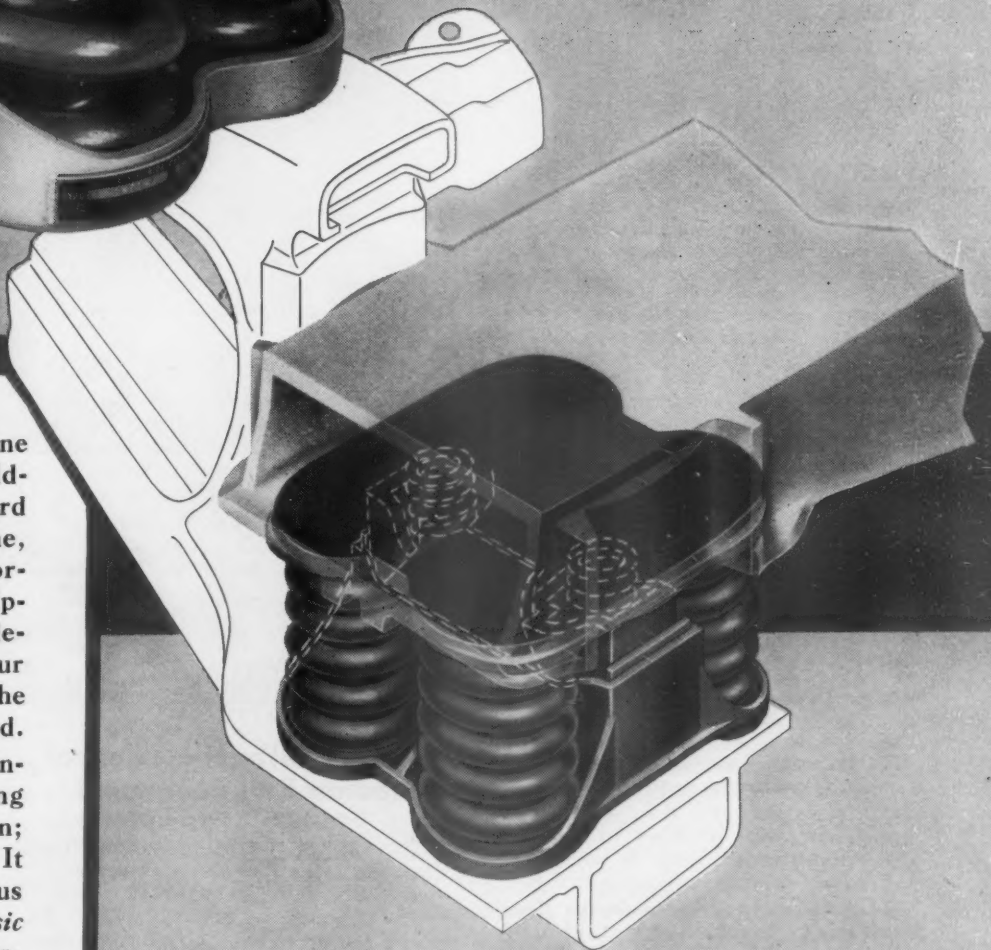
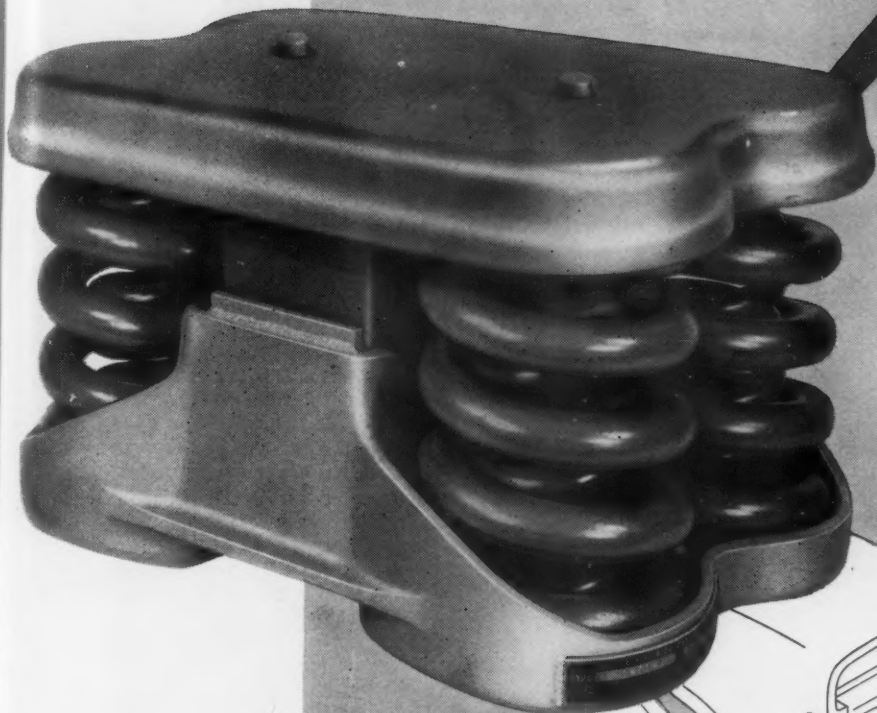


RADIANT HEATING AND MOVABLE PARTITIONS team up for the Pennsylvania. Shown here are lengths of 3/4-inch Byers wrought iron piping, laid on 10 5/16-inch centers and welded into three-inch wrought iron headers at intervals. They are used to carry hot water under the floors of the mezzanine offices in the railroad's two new warehouse buildings along Pittsburgh's Penn avenue. The office area, which is for the use of warehouse patrons, is 27

ft. wide and runs the length of each building, a total of over 1,600 feet. Flexibility of accommodations is achieved by use of movable partitions, which can be arranged to vary the number and size of offices as needed, and by use of radiant heating, which leaves the walls free of radiators. The floor is of asphalt tile, set over a five-inch slab of concrete, in the middle of which rest the heating pipes. A layer of insulation is used underneath the pipes

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Railroading is face to face with one of its greatest challenges. Carbuilders already are producing at a record rate, but there isn't enough time, money, or material to meet tomorrow's needs entirely with *new* equipment. That's why the A.S.F. Ride-Control Package has a place in your planning. It gives old freight cars the riding qualities you are sure to need.

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CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended May 19 were announced by the Association of American Railroads on May 24 as follows:

	Surplus	Shortage
Plain Box	482	4,875
Auto Box	0	103
Total Box	482	4,978
Gondola	397	2,860
Hopper	0	962
Covered Hopper	0	80
Stock	1,061	95
Flat	0	1,040
Refrigerator	5,062	0
Other	296	10
Total	7,298	10,025

flag any approaching trains in the prescribed manner.

"Under these conditions, the engineman of the 'Red Arrow' should have had a caution signal at the signal bridge west of Radnor station about three miles from the point of accident, telling him to slow down to 30 m.p.h., and to approach the next signal prepared to stop. The next signal he encountered at the signal bridge east of Villanova station should have shown a 'stop and proceed' indication which told the engineman to stop and proceed at restricted speed, i.e., not exceeding 15 m.p.h. and to be prepared to stop . . .

"Our tentative information is that the engineman of the 'Red Arrow' did stop at the 'stop and proceed' signal east of Villanova station, but we are unable to explain how, in view of the rules, his train could have been moving, following the stop, at such speed as to cause an accident such as that at Bryn Mawr. The distance between the 'stop and proceed' signal east of Villanova station and the point where the 'Red Arrow' hit the 'Night Express' is one mile and a quarter. "The engineman of the 'Red Arrow' had a good record with the railroad and had been an engineman for 25 years."

Mr. Symes' statement concluded with a brief outline of P.R.R. safety practices, and with promises to assist in the investigation, and to settle all claims "fairly and promptly."

On the day of the wreck, the Pennsylvania's Pier 46 South at Philadelphia was swept by a five-alarm fire; and it was announced at New Brunswick, N. J., that the company would be brought to trial there on June 11 on one of the 84 manslaughter indictments obtained against it as a result of the death of that number of persons in the February 6 wreck at Woodbridge, N. J., of its Jersey City-Bay Head "Broker."

Freight Car Loadings

Loadings of revenue freight in the week ended May 19 totaled 809,475 cars, the Association of American Railroads announced on May 24. This was an increase of 1,348 cars, or 0.2 per

cent, compared with the previous week; an increase of 66,162 cars, or 8.9 per cent, compared with the corresponding week last year; and an increase of 35,565 cars, or 4.6 per cent, compared with the equivalent 1949 week.

Loadings of revenue freight for the week ended May 12 totaled 808,127 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS For the week ended Saturday, May 12			
District	1951	1950	1949
Eastern	140,974	123,122	137,936
Allegheny	147,676	135,178	163,365
Poconos	61,645	59,209	64,483
Southern	130,972	117,372	118,261
Northwestern	128,790	109,930	117,437
Central Western	118,663	110,145	113,337
Southwestern	59,407	56,833	56,919
Total Western			
Districts	306,860	276,908	287,693
Total All Roads	808,127	711,789	771,738
Commodities:			
Grain and grain products	45,132	38,491	46,267
Livestock	8,135	8,034	9,173
Coal	132,999	140,335	157,404
Coke	16,175	13,055	13,242
Forest products	48,514	42,218	39,876
Ore	82,892	55,418	74,115
Merchandise l.c.l.	77,102	76,404	79,715
Miscellaneous	397,178	337,834	337,946
May 12	808,127	711,789	772,738
May 5	803,337	743,996	768,327
April 28	824,662	745,295	785,444
April 21	809,520	722,688	769,347
April 14	777,989	707,385	765,943
Cumulative total 19 weeks	14,257,364	12,455,207	13,574,894

In Canada.—Carloadings for the week ended May 12 totaled 87,474 cars, compared with 83,200 cars for the previous week, and 75,353 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
May 12, 1951	87,474	37,024
May 13, 1950	75,353	27,961
Cumulative totals for Canada:		
May 12, 1951	1,455,785	687,954
May 13, 1950	1,323,795	575,248

Newman Cites High Cost of Canadian Rail Equipment

(Special to Railway Age)

The average cost of equipment to a Canadian railroad is about 35 per cent more than to a United States road, W. A. Newman, of Montreal, chief of motive power and rolling stock of the Canadian Pacific, said in an address to the Institution of Locomotive Engineers at London, England, on May 22.

"At today's prices, investment required for the Canadian Pacific's freight car inventory would be \$175,000,000 greater than it would be for a comparable United States railroad," he said. The difference in costs arises from the fact that material costs are higher in Canada and that there is a 10 per cent sales tax on all Canadian equipment.

Inflation has caused the cost of mechanical department labor to increase 114 per cent from 1939 to 1951, materials to increase about 140 per cent, coal to increase 97 per cent, and the

price of freight cars by 135 per cent.

But, Mr. Newman added:

"Freight rates have not, in general, been advanced sufficiently to compensate for the present difficult economic conditions . . . Our average revenue per ton-mile in 1885 was 1.20 cents. For 60 years this average revenue declined . . . standing as late as 1947 at 0.95 cents per ton-mile. . . . Canadian railways were not permitted a general increase in freight rates until April 1948. This, together with subsequent increases, brought the average revenue for 1950 up to 1.33 cents per ton-mile. In terms of 1939 dollars this average for 1950 is about three-quarters of a cent per ton-mile."

At present, freight equipment spends 50 per cent of calendar time in terminals, and Mr. Newman said, "With the growing cost of equipment and the necessity of providing better service, it is essential that time spent in terminals be reduced and various developments and improvements are being introduced to secure this objective." He referred to the C.P.'s new St. Luc yard near Montreal, adding:

"Yards similar to this will have to be constructed in other principal cities in Canada where existing terminal facilities are now overloaded."

"A good deal of new [passenger] equipment is being introduced currently but our ability in this connection is restricted by the extremely high cost for modern passenger cars. . . . New roomette sleeping cars are now costing in excess of \$225,000 per car."

B. & O. Dedicates New Ore Pier at Baltimore

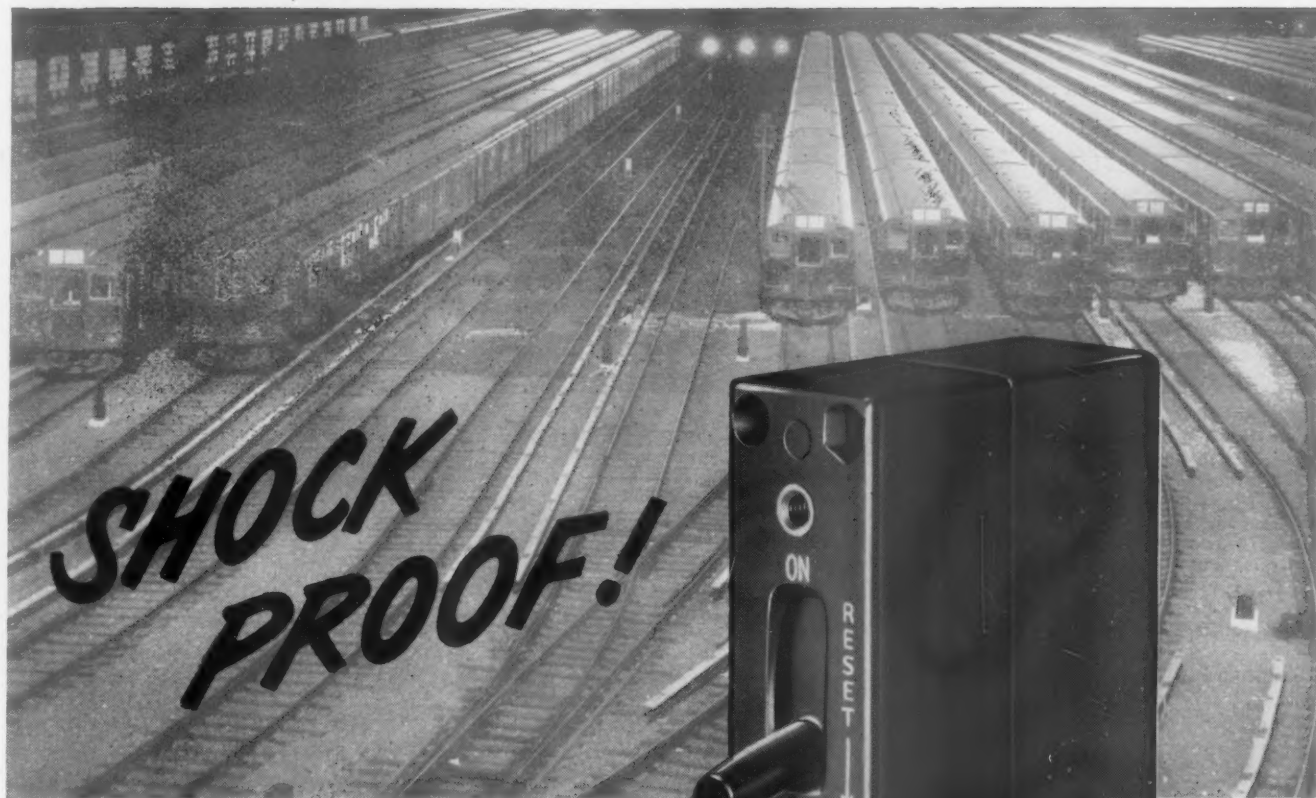
The new \$5-million pier which the Baltimore & Ohio built at Baltimore, to handle imported ore was formally dedicated on May 15. Speakers at the dedication ceremonies, held on the pier, were Governor Theodore R. McKeldin of Maryland; Mayor Thomas D'Alesandro of Baltimore; S. Page Nelson, president of the Baltimore Association of Commerce, and Colonel R. B. White, president of the B. & O.

The pier's electrically-operated machinery was switched on by Mrs. White, wife of the B. & O. president. This started the big buckets on their job of unloading the Ore Steamship Company's S. S. "Chilore" which had come in from Chile with 26,000 tons of iron ore destined for the Bethlehem, Pa., plant of the Bethlehem Steel Company. Meanwhile fireboats and other harbor craft joined in the celebration—with spouting water and screeching whistles.

The B. & O.'s traffic vice-president, Howard E. Simpson, was chairman of the dedication ceremonies. Guests for the occasion included railroad and industrial executives and civic leaders.

In dedicating the pier, President White said the B. & O. was looking ahead with confidence. He also said: "A strong American industry, dedicated to progress and service, and developed with vision and courage under our heritage of free enterprise, is the keynote of our strength and security. America's colorful past—a cou-

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AB BREAKERS**



Westinghouse P-1 Circuit Breaker defeats false service interruptions

Rough roadbeds are hard taskmasters for ordinary circuit breakers. Excessive vibration and shock can cause false switch tripping...interrupt electrical service needlessly. Westinghouse P-1 Circuit Breakers can take it—they are designed specifically for rough service.

The P-1 breaker is an adaptation of the Navy breaker used on PT boats. Here, P-1 type breakers proved their ability to withstand the roughest kind of operating conditions.

Rugged construction makes the difference. The case is made from heavy-duty Moldarta. Trip release mechanism operates *only* on sustained overloads—physical jarring cannot bother it.

Though sturdily built, the P-1 is small, compact. It combines both switch and protective device in a single unit. A bank of P-1's can be mounted in a panel requiring less space than separate fuse and switch units.

Booklet B-4081 describes all features of the P-1. Ask your Westinghouse representative for your copy, or write to Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pennsylvania.

J-30067

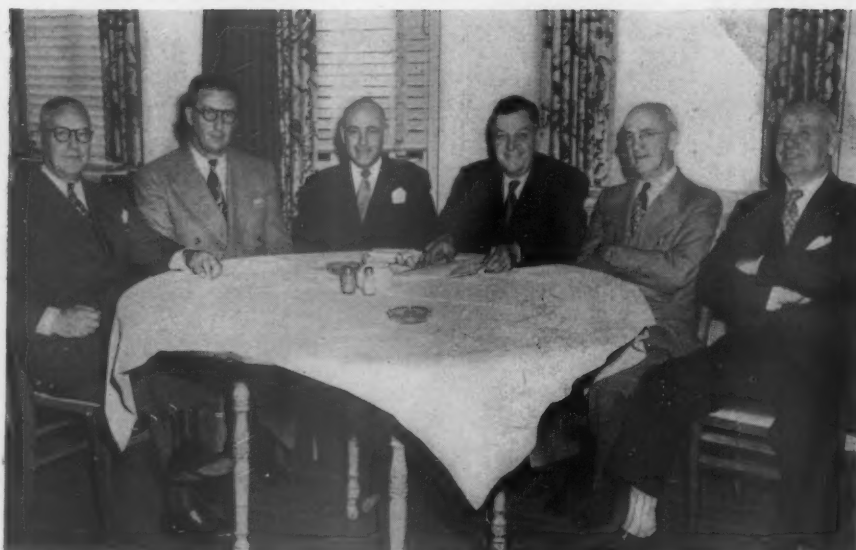


**YOU CAN BE SURE... IF IT'S
Westinghouse**

AB CIRCUIT BREAKERS

THE COMPLETE LINE





COMMUNITY RELATIONS were emphasized by the Chicago & Eastern Illinois when the road's Oaklawn shops, at Danville, Ill., were opened to inspection by over 100 of that town's civic, industrial and political leaders. At a luncheon following the inspection, C. & E.I. President Clair M. Roddewig said he hoped every one of Danville's 39,000 residents would become better

acquainted with the Oaklawn operation. Shown here at the luncheon are, left to right: Herman Douglas, executive vice-president, Second National Bank, Danville; George E. Bennett, C. & E.I. superintendent of motive power; A. W. Schroeder, superintendent; Mr. Roddewig; Mayor Don H. Wilson of Danville, and J. T. Theby, C. & E.I. general manager

rageous story in the history of nations —was built upon confidence in America's future. And it is with that same confidence with which we build today."

Baltimore's Mayor D'Alesandro took occasion in his address to reiterate his opposition to construction of the proposed St. Lawrence seaway. The seaway would be "economically unsound," he said, adding that the pier was "further evidence" that the St. Lawrence project was "not needed and should not be built" for the purpose of handling iron ore.

The pier is located in the Curtis Bay area of the Port of Baltimore, immediately adjacent to the B. & O.'s export coal pier. Railroad yards with a capacity of 1,800 cars support the two pier operations; and cars emptied at the coal pier will become immediately available for loading with ore, thus making for a balanced movement.

The ore-unloading facilities include buckets which scoop the ore out of ships' holds, dropping it into bins that feed it onto a conveyor belt. The belt carries the ore to a scale house where it is weighed automatically before being deposited in railroad cars on tracks below. Pictures of the unloading facilities were published on page 168 of last week's *Railway Age*.

The facilities were designed to unload the "largest ocean-going carriers" within a 24-hr. period, a B. & O. statement said. It also noted that the pier's annual capacity will be about 10 million tons of ore. And that manganese, chrome and other ores, as well as iron ore, are expected to be handled there.

Gross Revenue in April 16.2% Above Last Year

From preliminary reports of 82 Class I railroads, representing 81.9 per cent of total operating revenues, the Association of American Railroads has estimated that April gross amounted to \$679,235,517, an increase of 16.2 per cent above the \$584,621,248 reported for the same 1950 month. Estimated April freight revenue was \$576,339,859, as compared with April 1950's \$492,852,801, an increase of 16.9 per cent. Estimated passenger revenue was \$53,681,735, as compared with \$49,888,088, an increase of 7.6 per cent. All other revenue was up 17.5 per cent—\$49,213,923 as compared with \$41,880,359.

Nine More Roads Awarded Amortization Certificates

Nine railroads were among the latest group of transportation agencies to receive certificates of necessity authorizing accelerated amortization of facilities for tax purposes. The certificates were issued by the Defense Production Administration, upon recommendation by the Defense Transport Administration.

The nine roads, together with the amounts and projects involved, are listed below. The percentage shown in each case is the amount for which amortization has been approved.

Seaboard Air Line, \$702,333, for railroad track and related facilities, 65 per cent.

Monongahela Connecting, \$2,590,-

200, for yard tracks and appurtenances and classification yards, 65 per cent.

Chesapeake & Ohio, \$6,180,000, for diesel-electric locomotives, 65 per cent.

Pittsburgh & Lake Erie, \$14,448,000, for freight cars, 80 per cent.

New York Central, \$12,095,000, for freight cars, 80 per cent; and \$10,369,370, for diesel-electric locomotives, 65 per cent.

Southern, \$17,377,643, for diesel-electric locomotives, buildings and track, 65 per cent.

Great Northern, \$14,650, for switches and turnouts, 65 per cent.

Texas & Pacific, \$5,018,539, for freight cars, 80 per cent.

Cuyahoga Valley, \$320,000, for yard and track, 65 per cent; and \$4,000 for a storage building, 50 per cent.

As this latest group of certificates was made public, D.P.A. announced that it has begun a survey of all companies that obtained certificates of necessity up to May 7. The agency has asked such companies to furnish information showing, among other things, the award of construction contracts, revisions in the estimated costs of projects, and added capacity that will be available upon completion of each project.

According to D.P.A., this information will provide "a definite guide to progress of the industrial expansion program." The agency said it expects to send out these progress report forms quarterly in the future.

Third-Quarter Locomotive Program Is Set At 250

The National Production Authority has allocated steel, copper and aluminum for the construction of 250 locomotives in the third quarter of 1951. The agency will extend priority assistance to builders to assure their receiving the necessary materials and component parts.

Announcing the program May 22, N.P.A. said it involves 79,000 tons of carbon steel, 14,000 tons of alloy steel, 12,250,000 pounds of copper and 2,400,000 pounds of aluminum.

For the month of July, percentage allotments of these materials will be on the following basis: Electro-Motive Division, General Motors Corporation, 59.4 per cent; American Locomotive Company, 23.5 per cent; Baldwin-Lima-Hamilton Corporation, 12.9 per cent, and Fairbanks, Morse & Co., 4.2 per cent.

The agency said locomotive builders are authorized to use so-called "DO" orders to obtain these materials. They may also extend the priority ratings to their subcontractors.

The allotment of materials to the various companies was based on operations during 1948, 1949 and 1950, N.P.A. said. It noted that the first half of 1950 is frequently used as a base period, but said locomotive production "did not follow the historical pattern in the first half of 1950." To

(Continued on page 59)

Spans
with "

Here's why
"RIBBONRAIL"
is important news

• The New Orleans Public Belt Railroad recently installed continuous rail on the double-track 4½-mi. long Huey P. Long bridge over the Mississippi river at New Orleans.

portation, one of was taken out to the installed at the be work. The 39-ft. ra

Welded Rail Economy Weighed by Carriers

By Edward Kandlik

Railroad executives are eyeing welded continuous rail as a possible source of major future economies in track maintenance.

About 100 executives of the American Railway Engrs. Assn. convention in last week journeyed to City, Ind., to study an of continuous rail being by the Chicago South Bend Railroad.

The South Shore made two installatio

Officials View South Shore's Rail Weld Job

More than 100 railway officials watched a Chicago, South Shore, and South Bend rail- in the early stages of welding project which will eliminate the "clickety" in a five mile stretch of of Michigan City.

More officials explained 100 miles of track will be welded when the project is completed. In 1938 and 1939, 100 miles of track were installed in of East Chicago's In 1944 and 1945 a mile section was of Michigan City pave-

RF&P Ending Click-Clack Song of Rails

By WILLIAM B. FOSTER, JR.

Northbound passengers of the RF&P on and after June 23 needn't listen for the traditional clickety-clack of the wheels on the rails between milepost 6 and milepost 8—there won't be any.

Rail Pressure Welds Pass 100,000 Mark

ELGIN, Joliet and Eastern Railway, which has more pressure-welded continuous

... Welded Savings. With such technical obstacles overridden, weld enthusiasts emphasize the economies. With 39-foot rails the carriers must spend \$10 a mile for every

Evidence Grows That Welded Rails Will Prove Big Saving

By NANCY FORD

Will extended use of welded, or continuous, rail give the railroad in- its next big cut in operating costs. There is growing evidence it may, although it will be several years before operating accounts reflect the benefits. If obviously men were tomorrow to embrace this idea enthu- siasm for welded rail could greatly weight into "st- its use in rail-relaying so me-

First: RIBBONRAIL means low maintenance costs. Joint bars and bolts—the starting points of costly wear and corrosion—are eliminated. Instead, long lengths of rail—that provide smooth riding—require little, if any maintenance. Like diesels, CTC, and air-conditioning, RIBBONRAIL stands for Progressive Railroading.

Second: Railroads find that RIBBONRAIL production is efficient . . . that transportation and installation are routine . . . and expansion and contraction problems are readily controlled.

Third: RIBBONRAIL spells \$\$\$ saved to railroads! Since 1939, costs of steel for rail and fastenings has increased 80 per cent . . . track labor costs have increased 200 per cent. Compared to these increases, welds in RIBBONRAIL have decreased in cost as much as 25 per cent! How come? Increased volume, higher efficiencies, and OXWELD's research all have contributed to lower welding costs. Costs that mean more money saved—more return on the investment.

Use RIBBONRAIL in your track program. Write for booklet, "Progress in Rail Pressure Welding."



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A Division of Union Carbide and Carbon Corporation

UCC

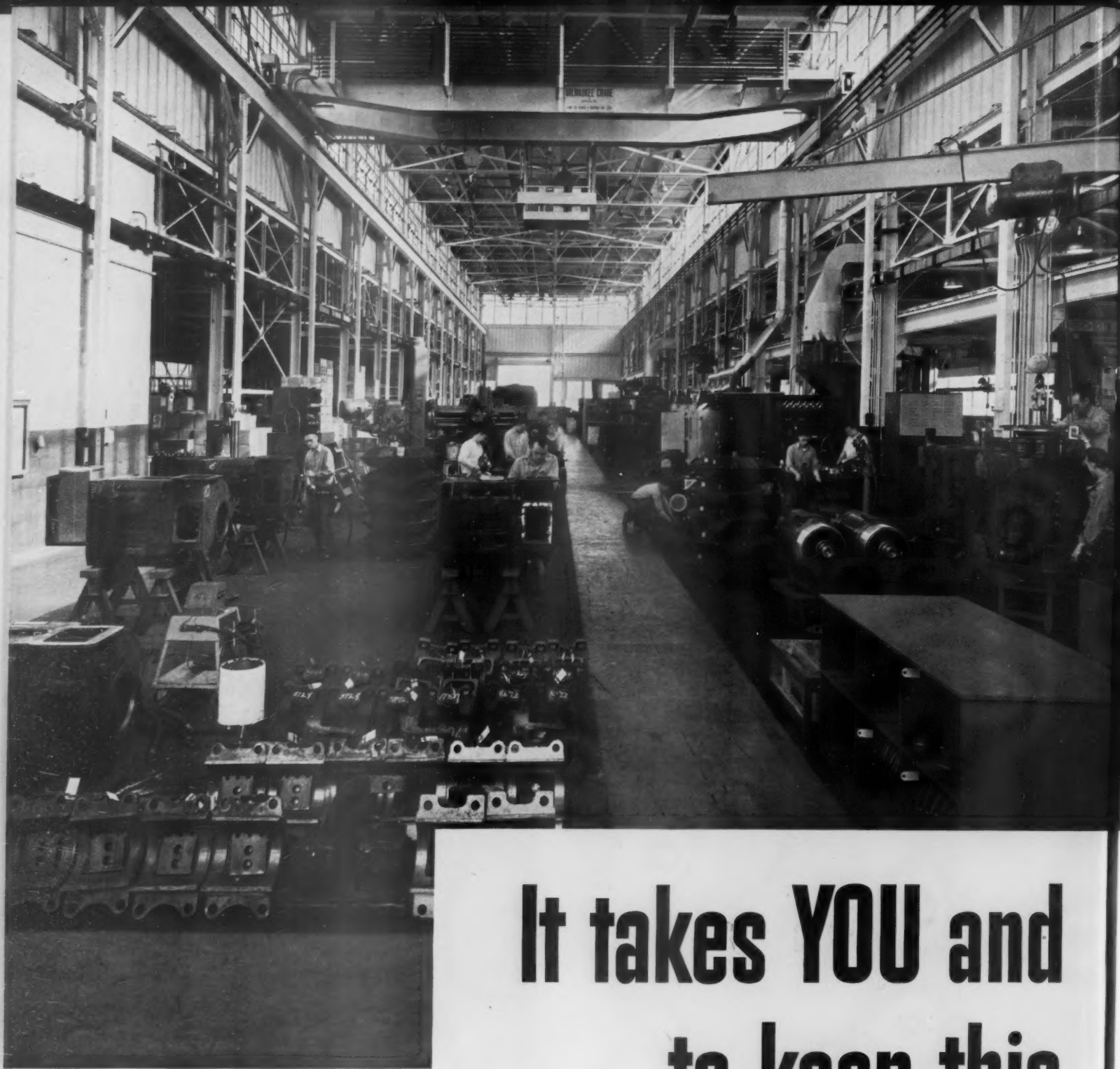
Carbide and Carbon Building Chicago and New York

In Canada:

Canadian Railroad Service Company, Limited, Toronto



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It takes YOU and to keep this

HERE'S AN INSIDE VIEW of the Electro-Motive Factory Branch at Robertson, Missouri—near St. Louis—newest of six similarly equipped factories and warehouses strategically located to provide on-line service for a majority of the General Motors locomotives on railroads in the United States.

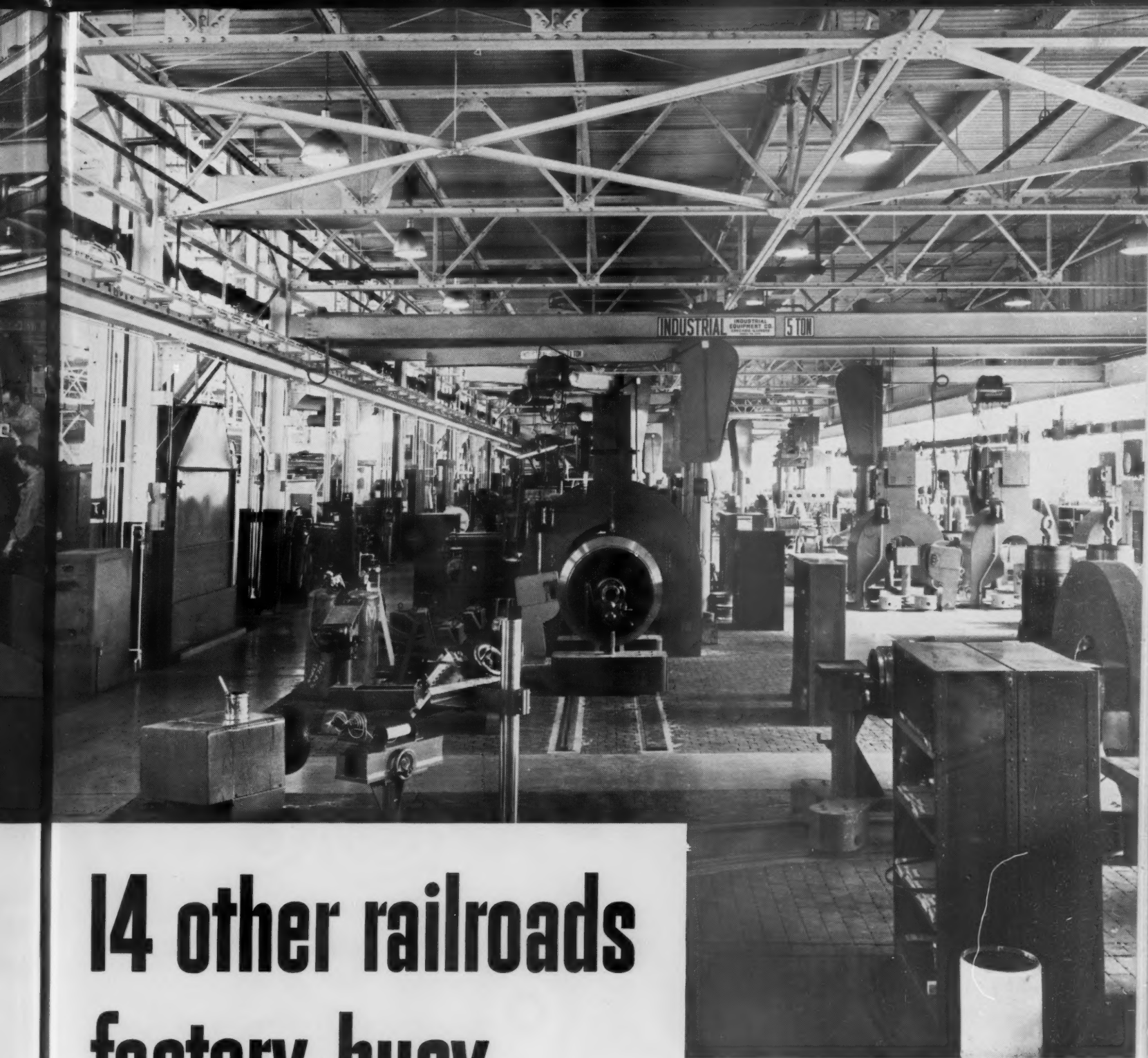
These factories (a seventh will be completed next year at Salt Lake City) were established at the request of our customers to handle factory rebuilding of components which require tooling and techniques comparable to those used in original manufacture.

These save railroads the necessity of investing large sums. It would be uneconomical for each railroad to attempt to duplicate one of these factories. They also save money for our customers through lower flat-rate costs made possible by production efficiencies.

In Electro-Motive shops, the finest tools and facilities are matched by the latest shop techniques—by labor-saving methods and procedures which duplicate factory practice of original manufacture and are kept constantly up to date.

The investment in such facilities is, of course, economical only where potential volume is sufficiently high, due to the combined requirements of a number of customers.

Actually, it takes 15 railroads to keep the Robertson shop busy. Twenty-three railroads are now being served, and the branch is already undergoing



14 other railroads factory busy

rearrangement and expansion to keep pace with anticipated demands.

What we mean by "Unit Exchange"

There are two ways in which components may be sent to Electro-Motive for rebuilding. "Rebuild and Return" involves the rebuild and return of the customer's own property. "Unit Exchange" means the immediate delivery of a previously rebuilt and fully guaranteed component in exchange for one needing repair sent in by the customer. You pay only for the work needed to bring the assembly to top-quality standards at Electro-Motive's low-flat-rate charge.

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS • LA GRANGE, ILL.



Home of the Diesel Locomotive

*In Canada: GENERAL MOTORS DIESEL, LTD.
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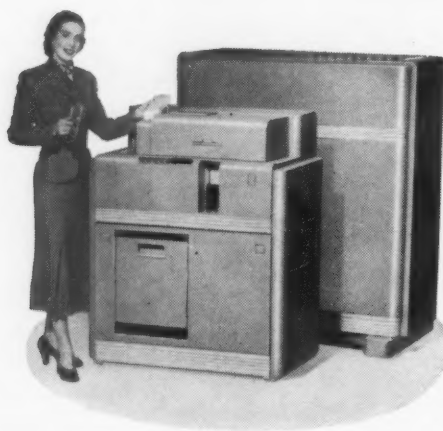


New Power

in Your Grasp!

Payrolls computed in minutes . . .
inventories and operating statistics calculated with the speed of light . . . complex engineering problems solved faster than the problems can be stated.

This is only a sample of the power put in your hands by the pluggable IBM Electronic Tube Assembly, the heart of the IBM Electronic Calculator. Here is power to do simple and complex calculation without the need for supervision of step-by-step operation . . . power to free men's minds from the burden of detail computation and to eliminate frequent human error.

**IBM**
TRADE MARK

INTERNATIONAL BUSINESS MACHINES
590 Madison Avenue, New York 22, N. Y.

(Continued from page 54)

have used that period as a base would have given one company 65 per cent of the total materials allocated, it said.

N.P.A. went on to say that in June the locomotive program called for a total of 40,000 tons of steel to build 325 new locomotives. It added that the third quarter program calls for a larger amount of materials to build fewer locomotives because of differences in the weight of the locomotives to be built.

Meanwhile, as this third quarter program was released by N.P.A., the Office of International Trade entered the locomotive picture. It went before N.P.A. to obtain materials needed to complete 160 locomotives for export to 26 countries. N.P.A. granted the necessary priority assistance to the six factories building the locomotives.

The Department of Commerce said the 160 locomotives were at various stages of completion, but shortages of materials had brought production to a halt. It said priority assistance was requested because the locomotives are important to "mutual defense."

New N.M.B. Mediator

Charles F. Wahl of Washington, D.C., has been appointed by the National Mediation Board to its staff of mediators. The N.M.B. announcement said that Mr. Wahl "has been in the service of the United States government for a number of years and has had extensive responsible experience in connection with the application of federal labor laws."

Parcel Post Rate Rise Approved by I.C.C.

Increases in parcel post rates, which are expected to yield more than \$100 million a year, will become effective October 1 as the result of an Interstate Commerce Commission report giving the regulatory body's consent to the adjustment. With one exception (the book-rate scale), the increases will be as proposed by Postmaster General Donaldson.

The additional \$100 million will raise annual parcel-post revenues by about 25 per cent—from \$400 million to more than \$500 million. And it is expected to wipe out the service's deficit as shown by the Post Office Department's "cost ascertainment" figures. However, the parcel-post rates on general merchandise traffic will remain lower than the Railway Express Agency's charges on like traffic.

R.E.A. and the Brotherhood of Railway Clerks became parties to the proceeding (No. 30690) to "urge the establishment of parcel-post rates that will pay the cost of the service," the commission's report noted. It went on to set out the Express Agency's contention that the "cost ascertainment" figures failed to include all items of parcel-post costs, and thus the reported 1949 deficit of \$104.9 million should

ANOTHER ERIE ALUMNUS

Through an unfortunate oversight, the name of Lynne L. White, president of the Nickel Plate, was inadvertently omitted from the list of former employees of the Erie who have gone on to become presidents of other railroads, which was published on page 89 of our May 14 Erie Centennial Issue under the heading "Little Red Schoolhouse for Railroad Presidents."

According to "Who's Who in Railroading," Mr. White served with the Erie from February 1918 to August 1936, when he became president of the Pittston Company. He returned to the Erie as vice-president in October 1938, holding that position until January 1, 1940, when he went to the Chicago & North Western. He remained with the latter, as chief operating officer and vice-president—operations, until August 1, 1948, when he became executive vice-president of the Nickel Plate. He was elected president of that road on January 26, 1949, thus becoming the 20th former Erie man to head another Class 1 railroad.

be increased by about \$42 million. The department disputed the contention and the commission dismissed the matter, saying "it appears that Congress has not specifically dealt with this feature."

The rate-increase proposal has been before the commission since last October, when Postmaster General Donaldson submitted it in the form of a letter. Mr. Donaldson thus complied with a directive which Congress embodied in an appropriation act of September 27, 1950.

The directive stipulated that none of the funds appropriated for the Post Office Department could be withdrawn from the Treasury until the postmaster general had certified that he had requested the consent of the I.C.C. "to the establishment of such rate increases . . . as may be necessary in insure the receipt of revenue from fourth-class parcel post mail service sufficient to pay the cost of such service." Mr. Donaldson's letter to the commission was based on a 1925 law which authorizes the postmaster general to revise rates on fourth-class matter—"subject to the consent of the Interstate Commerce Commission after investigation."

The increases will establish a scale of regular fourth-class rates ranging from 15 cents for the first pound on local shipments to 27 cents for shipments to the eighth zone. The 5-lb. rates will range from 20 cents local to 83 cents, eighth zone; the 20-lb. rates, from 39 cents to \$2.93; and the 70-lb. rates, from \$1.02 to \$9.93. On parcels which must be handled and transported outside mail bags, there will also be surcharges of not exceeding 50 cents per parcel on parcels weighing over 50 lb., and not exceeding 25 cents

per parcel on parcels weighing not more than 50 lb.

There are now no surcharges. Present rates for the first pound range from 10 cents local to 18 cents eighth zone; the 5-lb. rates range from 14 cents to 64 cents; the 20-lb. rates, from 27 cents to \$2.34; and the 70-lb. rates, from 64 cents to \$7.97.

On fourth-class mail consisting of catalogs and similar printed advertising matter, the new basis will establish a scale of first-lb. rates ranging from 10 cents local to 18 cents, eighth zone; and of rates ranging from 1.5 cents to 11 cents for each additional pound. The present range of first-lb. rates on this matter is from 7.5 cents to 15 cents, while the rates for each additional pound range from 1 cent to 6 cents.

Rates on Books

On books (except those sent by authorized libraries to readers and returned by such readers), the present rates are 8 cents for the first pound and 4 cents for each additional pound, regardless of the zone of delivery; but the general-merchandise zone rates apply on books where they are lower than the book scale.

The new book scale proposed by the postmaster general would have made the first-lb. rate 10 cents and the rate for each additional pound up to 10 lb. would have been 5 cents. These rates would have applied regardless of the zone of delivery, but they would have alternated with the general-merchandise zone rates, the latter applying on books where they would produce lower charges. To parcels of books weighing over 10 lb. the postmaster general would have applied the general-merchandise zone rates.

The commission found that the proposed rates on books were not related to the "ascertained cost of service." The modification it required will permit the establishment of "zone rates on books reflecting ascertained service costs."

Cost figures in the report indicate that the new book-rate scale will range from 13 cents for the first pound on local shipments to 20 cents for shipments to the eighth zone. The 5-lb. rates will range from 17 cents to 54 cents; and the 10-lb. rates, from 23 cents to 97 cents. In like manner will the "ascertained" costs fix the rates on heavier shipments of books, but cost figures beyond the 10-lb. bracket were not set out in the commission's report, not having been in the record of the case.

The postmaster general proposed no change in present rates on library books. Those rates are 4 cents for the first pound and 1 cent for each additional pound, when mailed for delivery within the first three zones or the state in which mailed.

The commission's report was accompanied by a dissenting opinion from Commissioner Cross. He objected to the surcharge feature of the approved

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Blocking a load to N-S-F means that only the nail is distorted. The floor remains undamaged—lading is secured by steel. Ribbed surface increases floor strength and provides recesses for anti-skid material. Plastic groove-filler operates to seal space when nails are withdrawn.



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Leading Roads

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- N-S-F, made of N-A-X HIGH-TENSILE steel, provides strength and durability for greater operating economy.
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These characteristics of N-S-F mean greater structural strength for your boxcars... greater efficiency in your overall operation.

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rate scale; and he complained that the zone rates involved are "relatively too high in the more distant zones in comparison with the rates for the zones nearer the point of origin." Mr. Cross, as he put it, hopes "that the postmaster general will find it consistent to re-examine his cost data with the view of formulating at an early date rates which will remove the discrepancies between the proposed rates and the ascertained costs of service."

Trip-Leasing of Trucks Banned by I.C.C.

Rules prescribed by the Interstate Commerce Commission with an August 1 effective date will prohibit common and contract motor carriers from trip-leasing trucks when the leased vehicles are to be operated by their owners or employees of the owners. The commission prescribed the rules in a report (dated May 8) on reargument in the MC-43 proceeding.

These rules, which will govern leasing and interchange of vehicles by common and contract truckers, will become effective instead of the more liberal set of regulations prescribed in a previous report by the commission's Division 5. (*Railway Age*, July 15, 1950, page 54.)

Division 5's failure to prohibit trip-leasing, and thus curb use by carriers of so-called "gypsy" truckers, was the principal basis on which several petitioners, including the railroads, appealed to the commission for the reconsideration out of which the present report has come. The International Brotherhood of Teamsters was also one of those petitioners.

The brotherhood also took the case to Capitol Hill, making it the basis for its opposition to President Truman's reappointment of Commissioner Rogers, who is a member of Division 5. Mr. Rogers was confirmed by the Senate and is now serving his new term, but he was one of three commissioners who did not participate in the present decision. The other two were Commissioners Mitchell and Knudson. At hearings on his reappointment, Commissioner Rogers complained that "intimidation" was involved in questions which Senator Tobey, Republican of New Hampshire, was asking him about the case. (*Railway Age*, April 16, page 48.)

The rule which will prohibit trip-leasing is one of a set of six regulations prescribed by the commission. Exemption provisions are embodied in one of the other five; and there it is stipulated that the regulations will not apply "to equipment utilized wholly or in part in transportation of railway express traffic, or in substituted motor-for-rail transportation of railroad freight moving between points that are railroad stations on railroad billing." The railroads and the Railway Express Agency had sought such exemption.

Other exemptions will apply to equipment leased by one authorized

carrier [i.e., common or contract trucker] to another authorized carrier for operation in territory which both lessor and lessee are authorized to serve; to equipment operated exclusively within a municipality or commercial zone, as defined by the commission; to equipment utilized by an authorized carrier pursuant to any plan of operation approved by the commission pursuant to the Interstate Commerce Act's section 5, which relates to combinations and consolidations of carriers; and to equipment without drivers leased by an authorized carrier from a lessor whose principal business is the leasing of equipment without drivers.

The leasing rule applying to non-exempt vehicles stipulates that leases must be in writing; and that the term of a lease must not be less than 30 days when the equipment is to be operated for the authorized carrier by the owner or employees of the owner. Here, however, the rule provides temporary relief for vehicles operating pursuant to the act's section 203 (b) (6), which is the provision exempting from regulation (except as to requirements relating to safety) trucks hauling agricultural commodities, livestock and fish. Subject to various safeguards, authorized carriers may continue to utilize the return movement of such trucks on a trip-lease basis for a period of six months beyond August 1.

More Details

Explaining itself on this temporary-relief matter, the commission said the reprieve would afford time for "adjustments." It added, however, that trip-leasing of this equipment of carriers of exempt commodities, from the standpoint of regulation, "stands upon no better footing than the trip-leasing of owner-operated equipment, and must be terminated within a reasonable period."

Other provisions of the leasing rule include one stipulating that rentals for leased vehicles "shall not be computed upon the basis of any division or percentage of any applicable rate . . . on any commodity . . . transported in said vehicle or on a division or percentage of any revenue earned by said vehicle during the period for which the lease is effective." There are other provisions relating to inspection and identification of leased equipment, and to qualifications of the driver.

One of the four remaining rules covers arrangements for interchange of equipment between authorized carriers, and another relates to rental of equipment by authorized carriers to private carriers and shippers. The latter prohibits authorized common carriers from renting equipment without drivers to non-carriers. The other two regulations are the general "applicability" rule and that embodying definitions.

Commissioner Lee filed a separate opinion, concurring in part. Saying that owner-operators have "served a

useful function" in the development of motor carrier service, Mr. Lee expressed his belief that the rules prescribed by Division 5 should be given a "practical test" before trip-leasing is prohibited. In any event, he would postpone the effective date of the ban on trip-leasing "for at least a year." Mr. Lee also said that the leasing to non-carriers by authorized carriers of equipment without drivers was not contrary to any provision of the act and should not have been condemned.

New "Golden Spike" Monument Unveiled

In observance of the 82nd anniversary of the driving of the "golden spike" at Promontory, Utah, a new granite monument, commemorating completion of the nation's first transcontinental railroad, was dedicated at Ogden on May 10. The new monument, located on the grounds of the Ogden Union station, was unveiled amid ceremonies attended by Utah's Governor J. Bracken Lee, vice-presidents J. W. Corbett and Ambrose Seitz of the Southern Pacific and Union Pacific, respectively, the mayor of Ogden and the president of the Mormon church.

The anniversary observance also included rehabilitation of the original "golden spike" monument at Promontory, some 50 miles northwest of Ogden, where the 1869 ceremony was held. This site is now completely off the S. P. line, and away from main highways. When the S. P. line directly across Great Salt Lake was constructed in 1904, the longer route around the lake via Promontory was reduced to branch line status, and was abandoned entirely in 1942. On June 23, 1950, *Railway Age* published a letter from Nelson Trotter, general solicitor of the Chicago & North Western, calling attention to the state of disrepair into which the original monument had fallen, because of weather, neglect and vandalism.

Safety Council Announces Railroad Contest Winners

Six Class I railroads, which have been named group winners of the Railroad Employees' National Safety Award of the National Safety Council, had a 1950 employee casualty rate 56 per cent less than the average rate for all Class I roads. The combined rate of employees killed and injured per million man-hours worked was 3.37 for the six winners, as compared with a 1950 rate of 7.65 for all Class I lines.

The six Class I winners and their rates are:

Illinois Central—50,000,000 or more man-hours; total accident rate 3.19, compared with an average of 6.81 for all railroads in this group.

Missouri-Kansas-Texas—20,000,000 to 50,000,000 man-hours; rate 4.49, compared with an average of 6.04 for all railroads in this group.

Duluth, Missabe & Iron Range—8,000,000 to 20,000,000 man-hours; rate 2.47,

NON SPIN!



SAFETY is our business!



- Safe, one-hand operation.
- Non-Spin.
- Life-of-the-car durability.
- 2½ turns of wheel to remove slack.
- Additional ½ turn to fully set brake.
- Precise control for spotting.
- Protects personnel, equipment, lading.

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compared with an average of 10.98 for the group.

Colorado & Southern—3,000,000 to 8,000,000 man-hours; rate 3.61, compared with a group average of 10.31.

Georgia Southern & Florida—1,000,000 to 3,000,000 man-hours; rate 4.07, compared with 12.48 for all railroads in this group.

Texas Mexican—less than 1,000,000 man-hours; rate 2.28, compared with a group average of 13.38.

The New York zone of the Pullman Company had the best employee safety record among the company's operating zones, while among its shop units, the Richmond, Cal., shop was the winner.

Among switching and terminal railroads, the New Orleans Terminal was winner in the group whose employees worked more than 1,500,000 man-hours and the Birmingham Southern among those whose employees worked less than that amount during 1950.

"The railroads are continuing to set outstanding records in employee safety," said Ned H. Dearborn, president of the council. "The actual number of employee deaths and injuries came down in 1950. In fact, deaths were the lowest in the history of American railroading. But due to fewer man-hours worked, the total casualty rate went up slightly."

S. P., Wayne Johnston Receive F. R. P. Awards

The Southern Pacific and Wayne A. Johnston, president of the Illinois Central, won, respectively, the 1950 Passenger Service Progress Award and the Public Relations Award of the Federation for Railway Progress. Both awards were scheduled for presentation at the federation's annual dinner in Chicago on May 24.

The S. P. was selected for the passenger service award on the basis of "its outstanding progress in passenger service during the past year," in which, as part of its \$34-million postwar program to improve passenger service, it put into service four new streamline trains and 119 new passenger cars. Previous winners of the award were the Chicago, Burlington & Quincy, 1947; the Atchison, Topeka & Santa Fe, 1948; and the New York, New Haven & Hartford, 1949.

The public relations award went to Mr. Johnston for a series of Illinois Central advertisements on "What Makes a Railroad?"

I.C.C. Delays New Auto Rates Until August 2

The Interstate Commerce Commission has again postponed, from July 2 to August 2, the effective date of its outstanding order requiring an adjustment of railroad freight rates on new automobiles.

The commission previously postponed the effective date after railroads in the various territories filed petitions for reconsideration of the decision in-

volved. The I. C. C. has not yet acted on those petitions.

That decision, reviewed in *Railway Age* of November 25, 1950, page 52, would have the effect of narrowing the spread between the rate basis applicable on shipments from factories in Detroit, Mich., South Bend, Ind., Toledo, Ohio, and Kenosha, Wis., and that applicable on shipments from the regional assembly plants of General Motors Corporation and the Ford Motor Car Company. The case is docketed as No. 29820.

Locomotive Development Committee Moves

Offices of the Locomotive Development Committee, Bituminous Coal Research, Inc., have been moved from Baltimore, Md., to 320 South Roberts road, Dunkirk, N. Y.—P. O. Box 225.

John Yellott will continue as director of research and Peter R. Broadley as assistant director of research at Dunkirk.

ORGANIZATIONS

Crecelius Heads Claim Agents

W. J. Crecelius, general claims agent of the Louisville & Nashville, was elected president of the Association of Railway Claim Agents at its 62nd annual meeting at Biloxi, Miss.

He succeeds K. A. Carney, chief claim agent of the Illinois Central. Vice-presidents elected at the Biloxi meeting were F. O. Divisek, chief claim agent of the Denver & Rio Grande Western, F. H. Hitchcock, general claim agent of the Atchison, Topeka & Santa Fe's Coast Lines, and H. C. Ozburn, assistant general claim agent of the Central of Georgia. F. L. Johnson, general claim agent of the Gulf, Mobile & Ohio, was reelected secretary-treasurer of the association. The Mount Royal Hotel, Montreal, was selected as headquarters for the association's 63rd annual meeting, to be held June 10-13, 1952; while Detroit will be the location of the 1953 convention.

Superintendents' Meeting At Chicago, June 12-14

The American Association of Railroad Superintendents will hold its 55th annual meeting at the Hotel Stevens in Chicago, June 12-14. Because of the critical effect of present "defense" conditions on the railroad industry the meeting will be centered around ways to meet current operating problems. L. R. Powell, Jr., president of the Seaboard Air Line, will be the luncheon speaker on June 13, and N. R. Crump, vice-president of the

Canadian Pacific, will deliver the "charge."

Details of the three-day program follow:

TUESDAY, JUNE 12
9 a.m.

Registration
10 a.m.

Invocation.

Charge to Superintendents by N. R. Crump.
Regular business of the association.
Report of committee No. 4—Loss and damage prevention.

2 p.m.

Report of Committee No. 3—Modern practices in efficient handling of shop cars and car inspection.
Address: 'Role of Railroads in Civil Defense,' by Clarence P. Fisher, general manager, Chicago Union Station.

Report of Committee No. 1—Superintendent's responsibility for shipper relations.

8 p.m.

Panel Discussion: The most effective way of testing compliance with rules. Panel members: S. M. Gossage, assistant director personnel, C. P., moderator; T. E. Wheeler (C. P.) V. A. Ericson, (Chicago & North Western); J. B. Jones, (Pennsylvania), and J. E. Guilfoyle, (New York Central).

WEDNESDAY, JUNE 13

9:30 a.m.

Report of Committee No. 2—Superintendent's responsibility for efficient car handling.
Address: 'Role of Railroads in War' (speaker to be announced).

Report of Committee No. 6—Better control of car costs.

12:30 p.m.

Annual luncheon. Address by L. R. Powell.
Followed by an inspection of the Illinois Central's Markham yard.

THURSDAY, JUNE 14

9:30 a.m.

Report of Committee No. 5—Education of supervisors and maintenance of employee morale.

Smith, McGinnis to Address Accounting Division

R. H. Smith, president of the Norfolk & Western, and Patrick B. McGinnis, chairman of the board of the Norfolk Southern, will be the principal speakers at the 57th annual meeting of the Accounting Division, Association of American Railroads. The meeting will be held in New York at the Biltmore Hotel from June 11 through June 14.

Another railroad chief executive—President Gustav Metzger of the New York Central—will make an opening-session talk, greeting the delegates. Other speakers will include the division's chairman, I. V. Jessee, comptroller of the N. & W., and E. H. Bunnell, A.A.R. vice-president in charge of the Finance, Accounting, Taxation and Valuation Department.

Also, there will be what the program lists as "informal addresses" by I.C.C. bureau directors attending the meeting. These directors are Cecil W. Emken of the Bureau of Accounts and Cost Finding; W. H. S. Stevens of the Bureau of Transport Economics and Statistics; and George S. Douglass of the Bureau of Valuation.

Chairman Jessee will preside at the meeting, other proceedings of which will include reports of the division's various standing committees. The meeting's sessions will be those of June 12 to 14, the program for the 11th calling for the usual "open house" meetings of the standing committees.

Manufacturers of business machines and office equipment will stage an exhibit of the usual type. The exhibitors "plan to demonstrate their latest and most modern equipment," according to a letter which Chairman Jessee sent out with the meeting's program. The

letter also said that several presidents of railroads serving New York had advised that they expect to attend the meeting. G. H. Albach, comptroller of the N.Y.C., is chairman of the committee on arrangements for the meeting.

The **Western Railway Club** (Chicago) has elected John P. Morris to succeed L. J. Ahlering as president. Mr. Morris is general manager of the mechanical department of the Atchison, Topeka & Santa Fe, while Mr. Ahlering is purchasing agent for the Chicago & Eastern Illinois. At the same time, Paul E. Feucht, vice-president of the Pennsylvania, was elected vice-president of the club. Formal installation of the new officers took place at the annual meeting on May 21.

The **Chicago Transportation Club** has announced a "Freight Forwarders' Night" to be held on June 5 at the La Salle Hotel. The program, which will begin at 7 p.m., will consist of a panel discussion by prominent executives from the forwarding industry who will detail for the club's membership various phases of forwarding operations. The discussion will be recorded on tape and will be subsequently available to any traffic clubs desiring to make use of it. Already available is a recording of a previous panel discussion on world trade. Clubs interested may inquire through club headquarters at 407 South Dearborn street, Chicago 5.

The **Toronto Railway Club** will hold its annual summer outing and dinner on June 1. A golf tournament will be held at the Islington Golf Club and a tour of the Yonge Street subway has been arranged for non-golfers. Dinner will be served in the Royal York Hotel at 7 p.m.

SUPPLY TRADE

Percy H. Waller has opened his own offices at 122 South Michigan avenue, Chicago, and will represent the American Manganese Steel division of **American Brake Shoe Company**, offering railroads and car-builders a new line of specially designed railway truck, brake and running gear specialties known under the trade name Mangosteel. Mr. Waller was formerly associated with the Pullman Company for 37 years in various divisions, more recently as assistant chief engineer and assistant to the chief maintenance officer.

The **Walter Maguire Company**, New York, has appointed **C. Raymond Ahrens, Inc.**, 30 Church street, New York, as national distributor to railroads of Cortland Emery Aggregate. C. Raymond Ahrens, Inc.,



G. C. Scott, above, former service manager of Vapor Heating Corporation, who has been appointed service assistant to the vice-president in charge



of sales, and R. J. Armbrust, below, who becomes his successor. Mr. Armbrust has been associated with Vapor in a service capacity for nine years

maintains representatives in Chicago, Boston, Atlanta, Denver, San Francisco and Seattle.

The Cleco division of the **Reed Roller Bit Company**, Houston, has appointed **House of Pfaff, Inc.**, 10-36 49th avenue, Long Island City 1, N. Y., as distributors of Cleco products in that area.

The **Machinery & Welder Corp.**, St. Louis, has been appointed by the **General Electric Company** as a distributor for G-E stainless-steel arc welding electrodes in addition to the line of G-E arc welding equipment and mild-steel electrodes it has carried for more than 20 years. Stocks of the electrodes will be maintained in warehouses in Chicago, Milwaukee, St. Paul, Moline, Ill., and St. Louis.

Joseph V. Condon has been appointed general manager of the **Canadian Railroad Service Company**, a unit of the **Union Carbide & Carbon Corp.**, with headquarters in Toronto, succeeding **H. V. Gigandet**, vice-president, who has retired.

E. N. Sleight has been elected

vice-president in charge of the Chicago office of the **Gustin-Bacon Manufacturing Company**. Mr. Sleight joined the company in 1937, in Kansas City, as a sales trainee in the railroad sales department and was transferred to the Chicago office in September 1937. He



E. N. Sleight

was appointed division manager in January 1943, and, in his new position, will continue sales management of the Chicago office.

Leonard O. Mjolsnes has been promoted from assistant chief engineer to chief engineer of the diesel equipment section of the Scintilla Magneto division of **Bendix Aviation Corporation**, Sidney, N. Y., succeeding **A. T. Bremser**, deceased. Mr.



Leonard O. Mjolsnes

Mjolsnes was graduated from the University of Minnesota in 1935 with a B. S. degree in mechanical engineering and later worked for the Baldwin Locomotive Works at Philadelphia, and for the Detroit Diesel Engine division of General Motors Corporation. He joined Scintilla in July 1947.

Donald A. Keating has been appointed railroad division sales manager of **Turco Products, Inc.**, at Los Angeles. Mr. Keating joined Turco in 1946 and worked in the Chicago divi-

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Adequate and Constant Circulation of Water . . .

keeps the tube temperature of Elesco steam generating circuits within safe limits . . . regardless of load.

In addition to this safety factor, the flow is regulated to prevent the settlement of solids within the generating circuits.

These two facts alone make the Elesco Controlled Recirculation Steam Generator ideal for train heating and comparative services. It pays to get the best.

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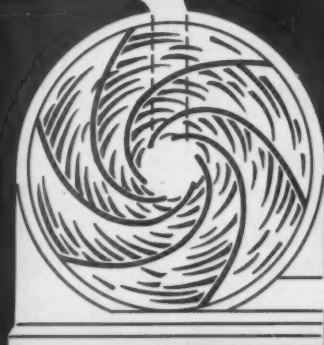
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Representing AMERICAN THROTTLE COMPANY, INC.



Superheaters • Pyrometers • Injectors • Steam Driers • Feedwater Heaters • Steam Generators • Oil Separators • Welded Boiler Shells • Throttles



Franklin I. Fickett, who has been appointed railroad sales engineer in Indiana, Ohio and Michigan for the Hunt-Spiller Manufacturing Corporation, Boston. Mr. Fickett was formerly with Fairbanks, Morse & Co.

sion as technical representative for the mid-west states, and in Los Angeles, both as process engineer and assistant



Donald A. Keating

technical department manager, handling direction of the development and control sections of that department.

EQUIPMENT AND SUPPLIES

Backlog of Locomotives On Order May 1 Was 1,755

Class I railroads had 1,755 new locomotives on order May 1, compared with 1,111 on order May 1 last year, according to the Association of American Railroads.

Of the 1951 total, there were orders for 1,733 diesel-electrics, 18 steam and 4 electrics. At the same time last year there were 1,097 diesel-electric, 10 steam and 4 electric locomotives on order.

During the first four months this year 838 new locomotives were installed on Class I roads, the A.A.R. said. This included 834 diesel-electric and 4 steam locomotives. In the first four months of 1950 these same roads installed 692 locomotives, of which 689 were diesel-electric and the remainder steam. In April alone Class I roads placed 217 diesel-electric and 2 steam locomotives in service, the A.A.R. reported.

Commenting on the number of locomotives on order as of May 1, the A.A.R. said they consisted of 2,363 power units, of which 2,337 were diesel-electric, 18 steam and 8 electric.

FREIGHT CARS

The Burlington Refrigerator Express Company has ordered 200 50-ton refrigerator cars from its own shops for delivery during the first quarter of 1952.

The Chicago, Indianapolis & Louisville has ordered one caboose car from the Thrall Car Manufacturing Company.

The Erie has ordered two 168-ton depressed center flat cars from its Dunmore, Pa., shops. These heavy-duty cars, to be equipped with two four-wheel trucks at each end with supporting span bolster, are for transporting electric transformers.

The Grand Trunk Western has ordered 125 70-ton covered hopper cars from the American Car & Foundry Co. at an approximate cost of \$900,000.

The Illinois Central has ordered 50 pulpwood cars and 100 cabooses from its own shops.

The Missouri-Illinois, a subsidiary of the Missouri Pacific, has ordered 100 70-ton covered hopper cars from the M.P.'s DeSoto, Mo., shops. Delivery is scheduled for next September.

The Pittsburgh & West Virginia has ordered five caboose cars from the International Railway Car & Equipment Mfg. Co., at an approximate cost of \$55,000. Delivery is tentatively scheduled for next August.

The St. Louis-San Francisco has ordered 200 70-ton gondola cars from the Pullman-Standard Car Manufacturing Company at an approximate cost of \$1,275,000. Delivery is scheduled for the third quarter of 1952.

The Southern Pacific has ordered 4,100 50-ton box cars and 900 50-ton gondola cars. The Pullman-Standard Car Manufacturing Company will build 1,600 of the box cars. The gondola cars, plus the remaining box cars, will be constructed in the road's own shops. This equipment, and the 600 freight cars ordered previously (*Railway Age*, March 26, page 69), comprises all but 1,400 of the 7,000 cars authorized for

purchase last February (*Railway Age*, February 26, page 51).

The Union Tank Car Company's 1952 carbuilding program calls for construction of at least 600 50-ton tank cars (I.C.C. class 105-A-300-W) in its own shops. Cars of this type currently on order at the company's Whiting, Ind., and Philadelphia shops total 1,300, all scheduled for construction this year, contingent only upon receipt of necessary steel.

The Wabash has ordered 300 50-ton box cars from its Decatur, Ill., shops for construction next year.

LOCOMOTIVES

The Atlantic & Danville has ordered one 1,600-hp. diesel-electric locomotive road-switching unit from the American Locomotive-General Electric Companies, at an estimated cost of \$150,000. Delivery is expected in July.

The Detroit & Toledo Shore Line has ordered two 1,500-hp. diesel-electric locomotive road-switching units from the Electro-Motive Division of General Motors Corporation. Delivery is expected in October.

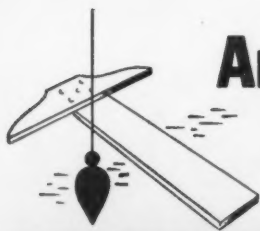
The Georgia has ordered two 1,200-hp. diesel-electric locomotive switching units from the Electro-Motive Division of General Motors Corporation, at an estimated cost of \$205,118. Delivery is expected in September.

The St. Louis Southwestern has ordered 16 diesel-electric locomotive units from the Electro-Motive Division of General Motors Corporation at an estimated cost of \$2,370,916. Included were six "A" and six "B" 1,500-hp. freight units (eight scheduled for delivery in November and four in December), and four 1,200-hp. switching units (two to be delivered in November and two in December).

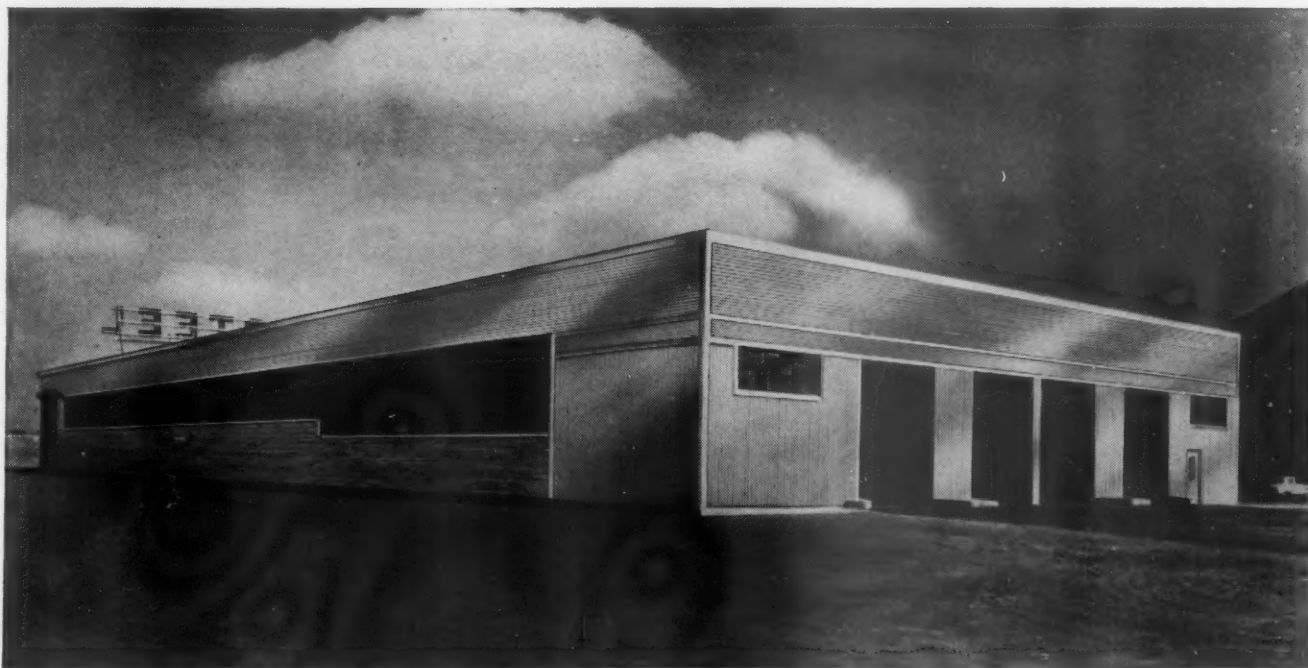
The Tennessee, Alabama & Georgia has ordered three 1,500-hp. diesel-electric road-switching locomotive units from the Electro-Motive Division of General Motors Corporation at an approximate cost of \$425,700. Two units already have been placed in service and the third is scheduled for delivery in July.

SIGNALING

The Atchison, Topeka & Santa Fe has ordered from the Union Switch & Signal Co. material to install centralized traffic control on 107.5 miles of single track between Bakersfield, Cal., and Calwa. The 17½-ft. style C control machine will be installed at Fresno, Cal., division headquarters. In addition to code and carrier equipment, the order includes style H-5 searchlight signals, M-23A dual-control electric switch machines, T-21 switch stands, SL-21A electric switch locks, (Continued on page 71)



Architect-Engineer's choice for Beauty, Long Life, Low Maintenance



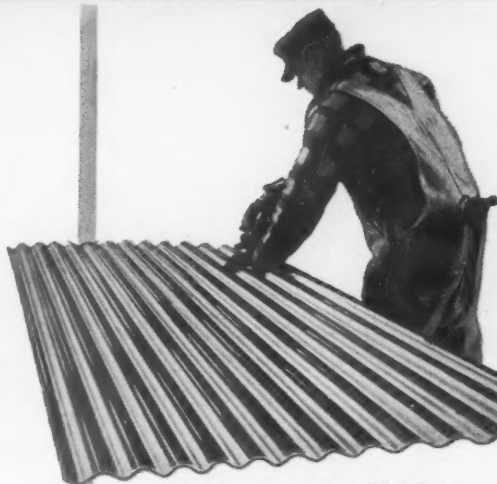
New warehouse—Ward Steel Co., North Cambridge, Mass.

When the Ward Steel Company of North Cambridge, Mass., undertook to build the most modern steel warehouse in New England, they called on Waghorne-Brown as designers and engineers. Waghorne-Brown specified rustproof, corrosion-resistant Reynolds *Lifetime* Aluminum Industrial Corrugated for siding. Their reasons were: appearance, long life, low initial cost and low maintenance (no painting)...plus great strength combined with light weight that saves money on framing (see specifications).

Aluminum's radiant heat reflectivity was another deciding factor. On walls or roof, it reduces inside summer temperatures and cuts winter fuel bills. An interesting detail in this building is the contrasting horizontal and vertical application, with aluminum corners and edging. For technical assistance and application details, call any Reynolds Office. Literature on request.

• Offices in principal cities...check your classified phone book for our Building Products listing, or write Reynolds Metals Company, Building Products Division, 2005 South Ninth St., Louisville 1, Ky.

Aluminum is required for planes and other military needs. Reynolds *Lifetime* Aluminum Industrial Corrugated is still produced, but the total supply is necessarily reduced. DO-rated orders receive priority handling.



Specifications for Reynolds *Lifetime* Aluminum Industrial Corrugated:

Thickness .032"
Corrugations 7/8" deep, 2-2/3" crown to crown
Uniform load support (roof) 80 p.s.f. on 4' purlin spacing
Uniform wind load capacity (siding) 20 p.s.f. on girt spacings up to 7'9"
Roofing width 35", coverage 32"
Siding width 33-3/4", coverage 32"
Lengths 5', 6', 7', 8', 9', 10', 11', 12'



REYNOLDS *Lifetime* ALUMINUM INDUSTRIAL CORRUGATED



*Another Example
of
Efficient Power
at Lower Cost*



Above: one of the three Cooper-Bessemer-powered General Electric 70-tonners serving Norfolk Southern. Each locomotive's Cooper-Bessemer diesel is rated 660 hp, one size of a complete locomotive diesel line from 300 to 2200 hp.

Cooper-Bessemer
**LOCOMOTIVE
DIESELS**

300 to 2200 hp

Designed for the job . . .

Right for the job . . .

What they learned about **Cooper-Bessemer** diesels on the *Norfolk Southern* pays off in **any** size locomotive

NORFOLK SOUTHERN RAILWAY COMPANY has had well over 2 years' experience with 3 locomotives like the one shown opposite. They are Cooper-Bessemer-powered General Electric 70 tonners—now well known for efficient *all-purpose* service.

For example, here on the Norfolk Southern, one unit is used solely for freight switching. It replaces 2 steamers. The other 2 units replace 3 steamers, and do a 2-way job—a daily 9-hour road run plus terminus switching totaling 18 hours of continuous service every day. Thus these 3 diesels do the work of 5 steamers. Availability is tripled. That big savings accrue is obvious.

Not so obvious is the fact that it takes engines with real *backbone* — engines basically *designed* for locomotive service to stand up, to give you the peak availability and minimum maintenance that really pays off!



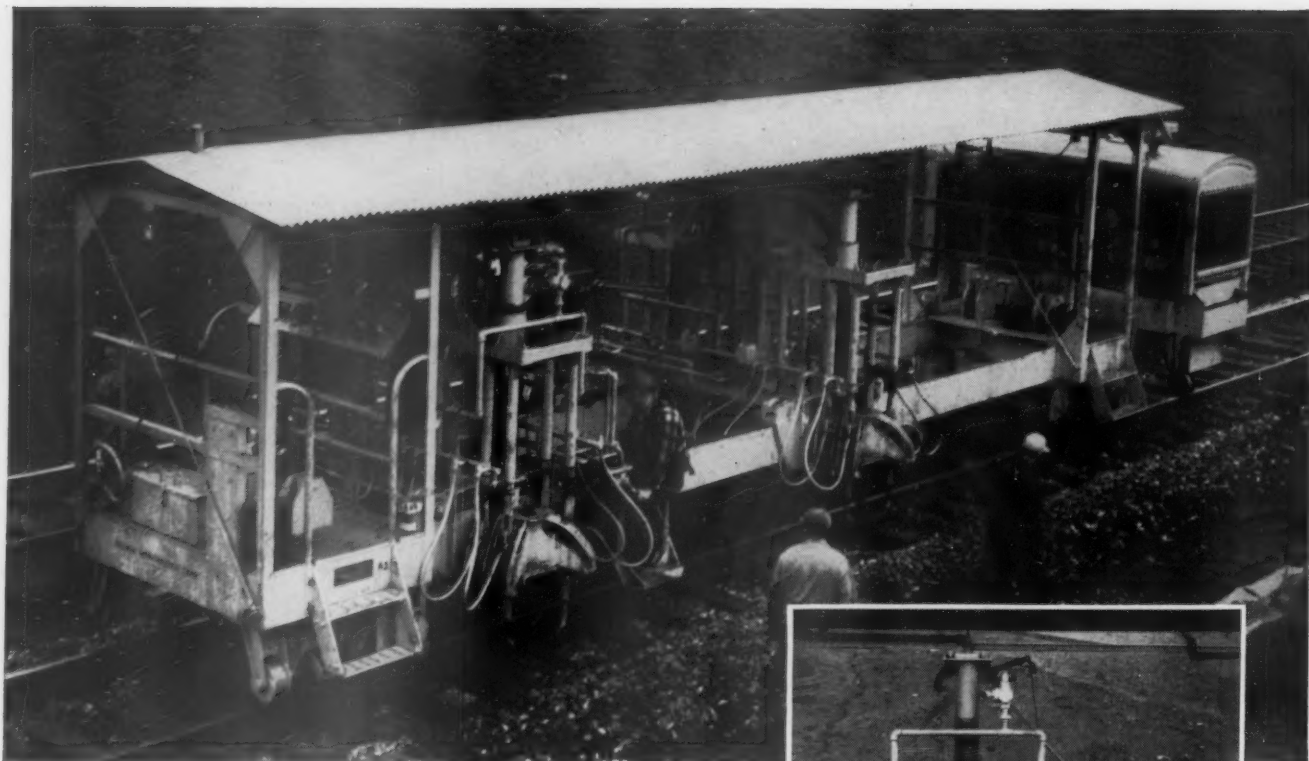
Norfolk Southern's Chief Mechanical Officer, J. H. Wilson (left), and Assistant to Chief Mechanical Officer M. B. Dowdy, who say, "we believe our Cooper-Bessemer-powered 70-tonners are giving the greatest economy and flexibility possible on their particular types of operation."

That's what you get in Cooper-Bessemers—engines specially developed by the country's biggest independent builder of locomotive diesels—engines built in units up to 2200 hp for *any* size locomotive.

Cooper-Bessemer railway engine warehouse and service branches: Gloucester, Houston, Los Angeles, San Francisco, Seattle, St. Louis, Tulsa, Odessa, Atlanta, Shreveport, Cooper-Bessemer of Canada, Ltd., Halifax, N. S.

The
Cooper-Bessemer
Corporation

MOUNT VERNON, OHIO — GROVE CITY, PENNA.



HR Track Raising and Air Tamping Machine Working on the Pennsylvania Railroad, Altoona Division, November 1950.

Now You Can Surface Track Efficiently and Save \$1800 Per Mile


You can air tamp stone ballasted track with the HR Track Raising and Tamping Machine at a saving of up to \$1800 per mile—over a comparable job with a multiple tool hand operated air tamping outfit. This machine is ideal for spot tamping and can be used for tamping out of face continuous raise with independent jacks.

It is equipped with two carriages, each mounted with 16 air tamping tools arranged in groups of eight centered over each rail, and is instrument controlled for simultaneous or independent opera-

tion on ties. The machine raises the track to pre-determined grade and cross levels. While tamping, it holds from 10 to 12 ties, depending on the spacing.

The Track Raiser is a self-propelled mobile unit, all operations air or hydraulic with a centralized control. Greater savings are possible on tracks ballasted with small stone, gravel or cinders. To learn more about operating economy and specifications write to Railway Maintenance Corporation, P.O. Box 1888, Pittsburgh 30, Pennsylvania.

Railway Maintenance Corporation

Designers and Manufacturers of: Moles; Super Moles; McWilliams Crib Cleaners;  Track Raiser and Air Tampers; McWilliams Multiple Tool Air Tamper; R.M.C. Rail Joint Packing.

(Continued from page 66)

relays, rectifiers, coded track circuit apparatus, transformers, switch circuit controllers, housings, etc. Field installation will be handled by railroad forces.

The General Railway Signal Company has received orders for 17 sets of intermittent inductive train control equipment. One set was ordered by the **Chesapeake & Ohio** for installation on a Pere Marquette district freight diesel, and 16 sets were ordered by Fairbanks, Morse & Co., to be installed on diesel locomotives for the **New York Central**.

The **Gulf, Colorado & Santa Fe** has ordered equipment from the General Railway Signal Company for an electric interlocking plant at Tower 19, Dallas, Tex. The 112-space machine will have 35 signal control and 34 switch control levers, 10 crossover and 10 derail levers, and 23 spare spaces at the interlocking and crossing with the Missouri-Kansas-Texas and the Texas & New Orleans.

The **Monongahela Connecting** has ordered equipment from the General Railway Signal Company for installation of a non-interlocked switch and signal control system in its 25th Street yard, Pittsburgh, Pa. The control machine, to be located in the yard tower, will have a 22-in. by 90-in. panel equipped with 29 track lights and 50 levers for control of 36 switch machines and 23 signals. Included in this order are type K relays, model 6 switch machines and type D color-light signals.

IRON & STEEL

The **Lehigh Valley** has ordered 2,508 net tons of rail from the Bethlehem Steel Company.

CONSTRUCTION

Atchison, Topeka & Santa Fe.—Grading in connection with a line change at Ibis, Cal., has been covered by a contract awarded to the Sharp & Fellows Contracting Co. of Los Angeles. A contract covering furnishing and driving of concrete piles for the proposed diesel shop at Argentine, Kan., has been awarded to the Raymond Concrete Pile Company of Kansas City. Construction of a foreman's office and service building and a journal packing and paint shop at Hobart, Cal., has been covered by a contract awarded to the William P. Neil Company, Ltd., of Los Angeles.

Chicago & North Western-Duluth, South Shore & Atlantic-Lake Superior & Ishpeming.—Division 4 of the I.C.C. has authorized these roads to construct approximately 6.4 miles of line, and abandon about

4.6 miles of existing line, in the vicinity of Negaunee, Mich. The new trackage, estimated to cost \$1,571,927, will serve the Jones & Laughlin Ore Co. Ore traffic will be pooled or divided by the three roads. (*Railway Age*, February 12, page 137.)

Louisville & Nashville.—Construction projects totaling more than \$1.4 million have been authorized, as follows: Company forces will replace telegraph with telephone circuits between Blue Ridge, Ga., and Marietta (\$32,407); diesel fuel facilities at Flomaton, Ala. (\$27,076)—including one 250,000-gal. welded steel tank, dike, pumphouse, loading and unloading connections—will be constructed by company forces (except for the tank, for which a contract has been awarded to the W. E. Caldwell Company of Louisville); additional wash, toilet and locker facilities to accommodate 830 men at Louisville will be built by company forces (\$79,785); the present roundhouse at Sibert yard, near Mobile, Ala., will be partially converted into a diesel shop (\$150,040); C.T.C. will be installed between Calera, Ala., and Montgomery (\$1,077,360); diesel fueling facilities will be constructed at Paris, Tenn. (\$64,030), with the Buffalo Tank Corporation of Baltimore constructing a 126,000-gal. and a 500,000-gal. tank and the balance of the work being undertaken by company forces; and a passing track at Oneonta, Ala., (\$20,536) will be constructed by company forces except that grading will be done by the Bowen Construction Company of Birmingham. In addition the 1951 bridge budget calls for an expenditure of \$2,504,403—\$1,557,959 chargeable to additions and betterments and \$946,444 to operating expenses.

Minneapolis, St. Paul & Sault Ste. Marie.—A contract has been awarded to the Stahr Company, Minneapolis, for construction of a freight car repair shop at Shoreham shops, North Minneapolis. The project will involve expenditure of about \$500,000.

New Orleans Union Passenger Terminal.—A contract has been awarded to the Gervais F. Favrot Company for construction of a portion of the new coach yard service facilities—three concrete service platforms, with steam, air, water and electric connections, estimated to cost \$175,000. The remaining portion of this work will be undertaken following transfer of existing railroad operations to the completed portion. Since the last progress report on construction of this new publicly owned terminal (*Railway Age*, February 5, page 76) the enginemen's wash and locker building, the steam power plant, the engine wash and service platforms and four miles of main track have been completed.

Reading.—This road has awarded the following contracts at the indicated

probable costs: To Empire Construction Company, Baltimore, for reconstructing superstructure of bridge 6/01, at Reading, Pa. (\$350,000); to C. W. Good, Inc., Lancaster, Pa., for grading and bridge construction for new connecting line from Bear Run Junction to Frackville Junction, Pa. (\$250,000); and to Jas. D. Morrissey, Inc., Philadelphia, for grading and bridge construction for new branch at Morrisville, Pa. (\$300,000).

Richmond, Fredericksburg & Potomac.—The following projects, all to be undertaken by this road's own forces, have been authorized at the indicated probable costs: Track changes and signaling at Possum Point, Va. (\$310,000), Acca (\$99,000), and Milford (\$54,000); and track changes and fuel and water stations at the Acca locomotive terminal (\$48,800).

Western Pacific - Sacramento Northern.—Joint construction of a 1,295-foot connecting track between the lines of these roads in Sacramento, Cal., has been approved by the I.C.C. The construction will cost an estimated \$55,762. It is part of a plan for rearranging the tracks of the S.N. inside the city. The S.N. will abandon two segments, totaling 14,709 feet, and will acquire trackage rights over about 13,000 feet of the W.P. It will pay \$128 a month for the trackage rights. The rearrangement of tracks will permit the city to improve and repave several streets.

CAR SERVICE

The I.C.C. has extended several service orders which had been scheduled to expire this month. The orders, extending amendments, and new expiration dates are as follows:

No. 562, which makes Homer C. King, deputy director of the Defense Transport Administration, the commission agent with authority to authorize the diversion of freight cars to meet emergency conditions. Amendment No. 3—May 25, 1952.

No. 851, which authorizes railroads serving Oregon, California and Arizona to substitute S.F.R.D. and P.F.E. refrigerator cars for box cars. Amendment No. 5—October 31.

No. 858, which limits time allowed for diversion or reconsignment of carload shipments of lumber. Amendment No. 5—September 30.

No. 860, which provides for the substitution of refrigerator cars for box cars to transport fruit and vegetable containers and box shooks from origins in Oregon, Washington, or California, to destinations in California. Amendment No. 4—October 31.

FINANCIAL

Illinois Central.—Distribution of *C. St. L. & N. O.*—At a special meeting of stockholders of the Chicago, St. Louis & New Orleans at Chicago on May 15, a resolution was adopted ratifying, confirming and approving action of directors in authorizing distribution of all property and assets of

the company, subject to liabilities, to the Illinois Central, in consideration of cancellation of indebtedness of the C. St. L. & N. O. to the I. C., and of complete cancellation and redemption of all the capital stock of the smaller road, all shares of which are owned by the I. C.

Long Island.—Sale of Rockaway Branch.—William H. Draper, Jr., trustee of the L. I., has announced that it is ready to open negotiations "immediately" with the city of New York for sale to the city of the L. I.'s Rockaway branch, city purchase of which has recently been recommended.

"For many years [Mr. Draper said in part] it has been apparent that the Rockaway branch would logically fit into the city's rapid transit system. As far back as 1933 an agreement was reached for sale to the city of the branch. Unfortunately, this agreement was never finally consummated by the city. Since that time, and particularly since the trestle across Jamaica bay was destroyed by fire last year, the railroad has been ready and willing to consider any serious offer for purchase of these lines.

"It seems clear to me that the riding public would be better served if the Rockaway branch is promptly incorporated into New York city's transportation system. The city obviously is in better financial position to rebuild the burned trestle, and so restore the shorter line service across Jamaica bay. Also, elimination of Rockaway trains, which operate through Jamaica into Pennsylvania Station, will provide additional capacity—train slots—for additional service to the rapidly-growing sections of Nassau and Suffolk counties."

The Rockaway branch extends from the L. I.'s main line near Rego Park, N. Y., across Jamaica bay, to Arverne, about 10.6 miles. Since some 1,800 feet of the Jamaica Bay trestle were destroyed by fire in May 1950 (*Railway Age*, May 13, 1950, page 63) trains have been run only as far as Hamilton Beach, with service to Arverne and the Rockaways being provided via the longer Far Rockaway branch through Jamaica and Valley Stream.

Long Island.—Trustee Certificates.—The I.C.C. has authorized the Pennsylvania and its subsidiary, the American Contract & Trust Co., to intervene in connection with the application of the L.I. trustee for authority to issue \$6,000,000 in certificates of indebtedness. (*Railway Age*, April 30, page 50.) The P.R.R. and American told the commission they have a "direct and substantial interest" in the Long Island, but added that they have not yet determined what position they should take as to this application.

New York, New Haven & Hartford.—Purchase of B.&P. Debentures.—Acting upon request of the road, the Interstate Commerce Commission has dismissed the New Haven's application for authority to purchase a claim against the Boston & Providence. The claim involved is based upon \$2,170,000 of matured 5

per cent B.&P. debenture bonds, most of which are owned by the New Haven's president, Frederic C. Dumaine. (*Railway Age* of April 8, 1950, page 63, and June 17, 1950, page 88.) The commission's dismissal action was embodied in a May 17 order by Division 2. The order referred to a letter wherein the New Haven had asked permission to withdraw the application "without prejudice."

Missouri Pacific.—Reorganization.—Division 4 of the I.C.C. has certified to the United States District Court for the Eastern District of Missouri the results of voting by eligible stockholders and creditors on the commission-approved plan of reorganization for this road. At the same time the commission denied a petition whereby the debtor corporation had requested issuance of a "proposed certification" which would have given it an opportunity to challenge the vote. (*Railway Age* of May 21, page 183.)

The commission's certification showed that the plan was accepted by better than a two-thirds vote of 10 of the 17 eligible voting groups. No votes were recorded for four groups, while the three groups voting for rejection were holders of M.P. preferred stock, holders of New Orleans, Texas & Mexico stock, and holders of M.P. secured serial 5¼ per cent bonds.

Reading.—R. W. Brown to Head Executive Committee.—Directors of this road have accepted the resignation of Col. R. B. White as chairman of the executive committee and have elected R. W. Brown to fill the vacancy, effective June 1. Mr. Brown will continue also as president of the Reading.

New Securities

Applications have been filed with the I.C.C. by:

CENTRAL OF GEORGIA.—To nominally issue \$1,067,000 of series A first mortgage 4 per cent bonds. The bonds would be issued against additions and betterments totaling \$1,519,272, which the road made during the period from July 1, 1948, to November 30, 1950. In its application the road said the bonds would provide available collateral for loans or advances from time to time. The road's first mortgage bonds are dated January 1, 1948, and will mature January 1, 1995. A total of \$11,853,300 in bonds is already outstanding under the mortgage.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.—To assume liability for \$1,005,000 of equipment trust certificates to finance in part 10 diesel-electric locomotives costing an estimated \$1,266,130:

Description and Builder	Estimated Unit Cost
6 1,500-hp. road-switching locomotives (Electro-Motive Division, General Motors Corporation)	\$148,992
4 800-hp. switching locomotives (Electro-Motive)	91,660

The certificates would be dated July 1, and would mature in 15 annual installments of \$67,000 each, beginning July 1, 1952. They would be sold by competitive bids, with the interest rate to be set by such bids.

DONORA SOUTHERN.—To issue a note for \$790,000 to the U. S. Steel Corporation as evidence of funds advanced on open account. The road used the advance to finance partially acquisition of nine diesel-electric locomotives. The note would bear interest at 2¼ per cent, and mature over a six-year period.

Division 4 of the I.C.C. has **authorized:**

CARBON COUNTY.—To issue 9,950 shares of \$100 par capital stock, to be sold at par to the United States Steel Corporation; and to issue to

the steel corporation two notes, totaling \$1,620,993, as evidence of indebtedness now carried in open account.

DENVER & RIO GRANDE WESTERN.—To assume liability for \$2,670,000 of series Q equipment trust certificates to finance in part five diesel-electric locomotives and 525 freight cars. (*Railway Age*, April 30, page 51). The certificates, to be dated June 1, will mature in 30 semiannual installments of \$89,000 each, beginning December 1, 1951. Division 4's report approved a selling price for the issue of 99.527 with interest at 3 per cent—the bid of Halsey, Stuart & Co.—which will make the average annual cost of the proceeds approximately 3.061 per cent. The certificates were reoffered to the public at prices yielding from 2.2 to 3.05 per cent, according to maturity.

Dividends Declared

Alabama Great Southern.—common, \$4, semi-annual; 6% participating preferred, \$4, semi-annual, both payable June 27 to holders of record May 28.

Albany & Vermont.—\$1, semiannual, payable May 15 to holders of record May 1.

Boston & Albany.—\$2.50, payable June 30 to holders of record May 31.

Catawissa.—5% 1st preferred, 75¢, semiannual, and 5% 2nd preferred, 75¢, semiannual, both payable May 23 to holders of record May 9.

Chicago Great Western.—5% preferred, 62½¢, accumulated, payable June 29 to holders of record June 22.

Chicago, Rock Island & Pacific.—common, 75¢; 5% preferred A, \$1.25, quarterly, both payable June 30 to holders of record June 13.

East Mahanoy.—\$1.25, semiannual, payable June 15 to holders of record June 5.

Erie.—50¢, payable June 13 to holders of record May 25.

Erie & Pittsburgh.—7% guaranteed, 87½¢, quarterly, payable June 11 to holders of record May 31.

Great Northern.—non-cumulative preferred, \$1, payable June 21 to holders of record May 21.

Kansas, Oklahoma & Gulf.—6% preferred A; 6% non-cumulative preferred B and C; 3% non-cumulative preferred, all \$3, semiannual, payable June 1 to holders of record May 19.

Minneapolis & St. Louis.—25¢, payable June 15 to holders of record June 1.

New York, Chicago & St. Louis.—6% preferred, \$1.50, quarterly, payable July 2 to holders of record June 8.

Pittsburgh & Lake Erie.—\$2, payable June 15 to holders of record May 23.

Pittsburgh & West Virginia.—50¢, payable June 15 to holders of record May 21.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, \$1.75, quarterly, payable June 1 to holders of record May 18.

Southern Pacific.—\$1.25, quarterly, payable June 18 to holders of record May 28.

Virginian.—62½¢, quarterly, payable June 22 to holders of record June 8.

Security Price Averages

	May 14	Previous week	Last year
Average price of 20 representative railway stocks	53.99	57.44	42.00
Average price of 20 representative railway bonds	94.56	95.32	90.34
	May 22	Last week	Last year
Average price of 20 representative railway stocks	52.70	55.99	42.79
Average price of 20 representative railway bonds	94.56	94.56	91.44

Investment Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Business Week, 330 W. 42nd st., New York 18.

Railroads—Not so Healthy as They Look. One big reason the rails are not as healthy as they look is operating costs. While they have spent billions for cost-saving diesels, labor-saving machinery and other additions and improvements, wages and taxes have them stymied. Rate increases are not a cure-all and further equipment buying will probably mean new equipment ob-

ligations before the year end. (Business Week, May 19, pp. 124-128.)

Fahnestock & Co., 65 Broadway, New York 6

Chicago, Milwaukee, St. Paul & Pacific. Weekly Review, May 14.

Great Northern Railway Co. Weekly Review, May 7.

H. Hentz & Co., 60 Beaver st., New York 4.

Operating Costs in the Railroad Industry. Fortnightly Review, April 30.

Hirsch & Co., 25 Broad st., New York 4.

Railroad Common Stocks. A Review of Business and Financial Conditions. May.

Jas. H. Oliphant & Co., 61 Broadway, New York 6.

Northern Pacific Railway Co. Oliphant's Studies in Securities, No. 237, May.

Smith, Barney & Co., 14 Wall st., New York 5.

Railroad Margins of Safety for Fixed and Contingent Interest Bonds and Dividends Paying Preferred and Common Stocks. Railroad Bulletin No. 56, April 26.

Vilas & Hickey, 49 Wall st., New York 5.

Missouri Pacific. May 21.

J. R. Williston & Co., 115 Broadway, New York 6.

Current Position of Railroad Securities. May 4.

RAILWAY OFFICERS

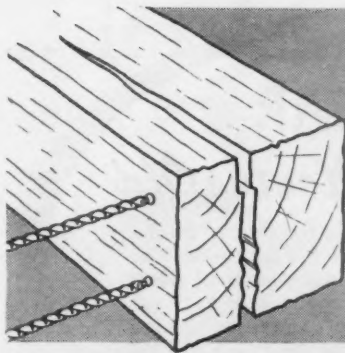
EXECUTIVE

W. H. Wenneman, vice-president—finance of the NICKEL PLATE at Cleveland since October 1, 1950, has been appointed vice-president—finance



W. H. Wenneman

and accounting, taking over the duties formerly handled by **E. M. Thomas**, vice-president—accounting, who died on April 14. **C. B. Campbell**, assistant to vice-president—finance, has been promoted to assistant vice-president—

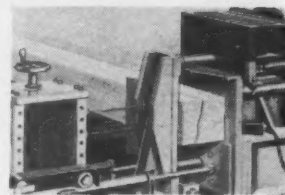


INCREASE TIE SERVICE LIFE

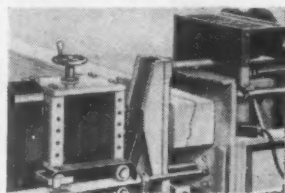
with GIANT GRIP DRIVE DOWELS and the Automatic GRAHAM TIE DOWELLING MACHINE



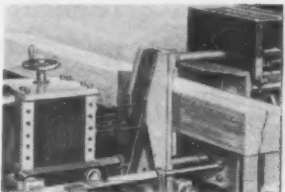
For fast, low cost dowelling of railroad ties—investigate the outstanding features and advantages of the modern Graham Tie Dowelling Machine. Furnished in Single or Double Units, this machine automatically drills and applies Giant Grip Drive Dowels into one or both ends of ties. Ties so protected pass through seasoning period, treatment, and road service, enjoying maximum security against end splitting, surface checking, and other causes contributing toward Infant Mortality—net result: maximum tie service life—reduced maintenance cost. Records of railroads now using these machines will convince you that this equipment will save you time, money and effort on all dowelling operations.



First Step—Ties are automatically fed into the machine, equalized for position and squeezed in the vise.



Second Step—Holes are automatically drilled slightly smaller than dowel size.



Third Step—Dowels are automatically screwed into tie by hydraulic pressure, completing operation. Tie is released and is then ejected by incoming tie.

Write today for Bulletin DM-1

GRAHAM

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FREIGHT CAR "INSULATION"—6 Months Old

Shown below is an unretouched photo of a freight-car "insulation" material six months after application in a new car. Car roof corrosion started with the water in the material when applied. It fails on the most important functions of car roof insulation: Preventing condensation and protecting the roof.



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Dednox 60% Cork Insulation, since it contains no water, coal tar or toxic solvents, is in excellent condition 14 years after application. Further, it *insulates* to prevent condensation in car roofs; it *waterproofs* and adheres to protect against corrosion of roof wood or metal; it *will not run* or slide off at any temperatures up to 300° F.; and Dednox shrinks $\frac{2}{3}$ less in drying than emulsion-type coatings.

Write for facts on Dednox economy and efficiency for all your freight cars.



DEDNOX was the first successful car insulation. It is made from highest quality cutback asphalt, containing at least 60% by volume cork granules. Its K-Factor (heat transmission rate) is .36.



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finance. Mr. Wenneman was born at Cleveland on December 13, 1902, and began his railroad career as secretary to the late O. P. Van Sweringen, then board chairman of the Nickel Plate. Mr. Wenneman became assistant to the chairman of the Chesapeake & Ohio and Pere Marquette in 1937, serving in that capacity until 1940, when he was appointed assistant to the president of the C. & O., the P. M. and the Nickel Plate. Four years later he was named



C. B. Campbell

vice-president of the three roads. From January 1, 1947, to June 1948 he was vice-president of finance and corporate relations for the C.&O.

Mr. Campbell joined the Nickel Plate as assistant to the vice-president—finance on May 1, 1948. He previously was with Halsey, Stuart & Co. in Chicago for 17 years, first as a member of the corporate buying department and later as a vice-president of that department.

Alphonsus L. Browne, assistant to president and traffic manager of the MANUFACTURERS RAILWAY, the ST. LOUIS & O'FALLON and the ST. LOUIS REFRIGERATOR CAR COMPANY at St. Louis, has been elected vice-president in charge of traffic of the three companies. Raymond C. Harrison, secretary, assistant general manager and purchasing agent of these companies, has been elected vice-president in charge of operation and secretary.

W. W. Whisman, vice-president in charge of traffic and assistant secretary of the EAST TENNESSEE & WESTERN NORTH CAROLINA at Johnson City, Tenn., has been elected vice-president and general manager, succeeding W. H. Blackwell, who died on March 25.

Franklin Way, superintendent of the DURHAM & SOUTHERN at Durham, N. C., has been promoted to assistant to president of that road and the PIEDMONT & NORTHERN at Charlotte, N. C. His new duties will involve operation and administration of both railroads. Mr. Way was born at Norfolk and was graduated from Virginia Military Institute (B.S. in C.E., 1934). After graduation he began his railroad

career with the Seaboard at Hamlet, N. C., subsequently being promoted to assistant division engineer, which position he held at both Raleigh and Atlanta. Prior to entering military service during World War II, Mr. Way was



Franklin Way

trainmaster of the Seaboard at Savannah, Ga. Upon separation from the army as a captain he returned to the Seaboard and in 1948 was promoted to assistant superintendent of the Virginia division at Raleigh. He became superintendent of the D. & S. in February 1949.

Leonard J. Knowles, who has served as traffic adviser to the Royal Commission on Transportation during the past two years, has returned to the CANADIAN NATIONAL at Montreal to take up special duties as assistant to the president. Mr. Knowles was born



Leonard J. Knowles

in Nottingham, England, in 1887 and joined the Canadian Northern (now Canadian National) in 1912, serving in various positions in the freight tariff bureau until 1918. He subsequently served as chief of the tariff bureau of the C. N., chief of rate section of the amalgamated C. N. and Grand Trunk system, and special traffic representative of the C. N. In December 1939 Mr. Knowles was ap-

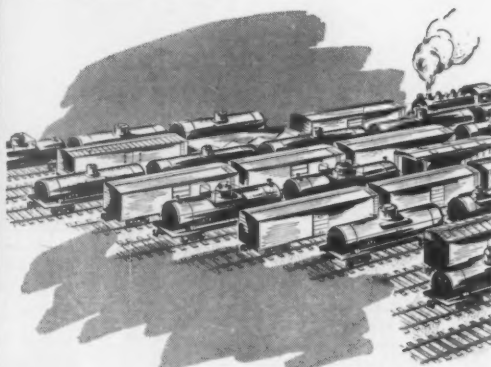
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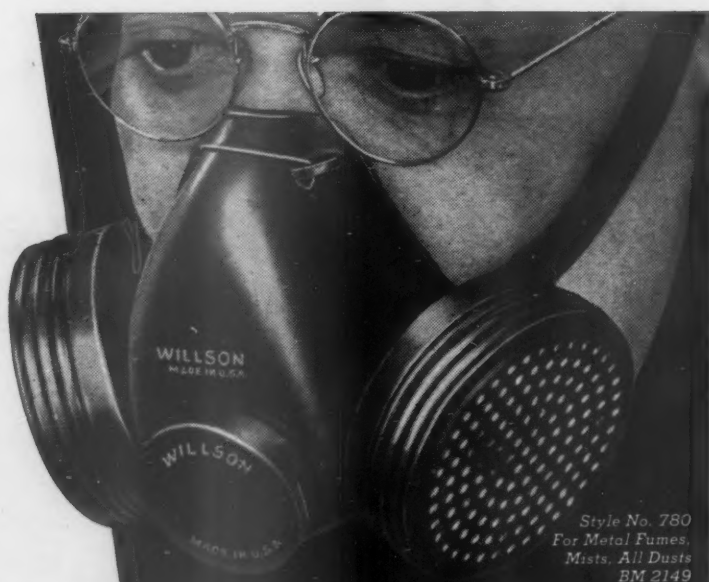
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pointed commission traffic representative of the C. N. in charge of freight traffic matters before the Board of Transport Commissioners of Canada or the Interstate Commerce Commission. In April 1947 he became freight traffic manager of the system at Montreal in charge of rates, which position he held until May 1949, when his services were loaned to the Royal Commission.

R. W. Bramwell, general traffic manager of the PITTSBURGH & WEST VIRGINIA, has been elected vice-president—traffic, with headquarters as before at Pittsburgh. The position of general traffic manager has been abolished. Mr. Bramwell was born at Toledo on October 18, 1895, and entered railroad service on July 1, 1916, with the Ann Arbor. He left that road on November 30, 1921, when he went with the Big Four (New York Central). From July 1, 1922, to May 16, 1927, he served with the Michigan Central,



R. W. Bramwell

going with the P. & W. V. on the latter date as assistant general agent at Detroit. Mr. Bramwell became assistant to vice-president at Pittsburgh on March 1, 1931, being appointed general eastern agent at New York three months later. On February 15, 1933, he was appointed traffic manager at Pittsburgh and on September 1, 1934, was transferred to Detroit. In January 1948 Mr. Bramwell was appointed general traffic manager at Pittsburgh.

FINANCIAL, LEGAL & ACCOUNTING

John J. Roche, chief clerk to the vice-president — finance and accounting, of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, and **J. T. Taussig**, statistician in the operating department, have been elected assistant secretaries. Headquarters of both continue at Chicago.

OPERATING

Horace A. McAllister, chief train dispatcher of the SEABOARD AIR LINE at Raleigh, N. C., has been appointed superintendent of the DURHAM &

SOUTHERN at Durham, N. C., succeeding **Franklin Way**, who has been promoted to assistant to president of the D. & S. and the Piedmont & Northern. Mr. McAllister was born at King's Mountain, N. C., and attended Columbia University. He joined the Western Union Telegraph Company in 1917 as a telegraph operator, and after four years of service became assistant chief telegraph operator for the Associated Press. He has also served as chief telegraph operator for several brokerage firms in New York. Mr. McAllister entered the service of the Seaboard in 1939 and was promoted to train dispatcher in 1941 and to chief train dispatcher at Raleigh in 1943.

John W. Dodge, who has been promoted to superintendent of the ILLINOIS CENTRAL's Springfield division, with headquarters at Clinton, Ill., began his service with that road in 1936



John W. Dodge

at Chicago. He has served on the Chicago Terminal, St. Louis, Springfield and Kentucky divisions. Prior to his promotion he had been trainmaster at Louisville since September 1949.

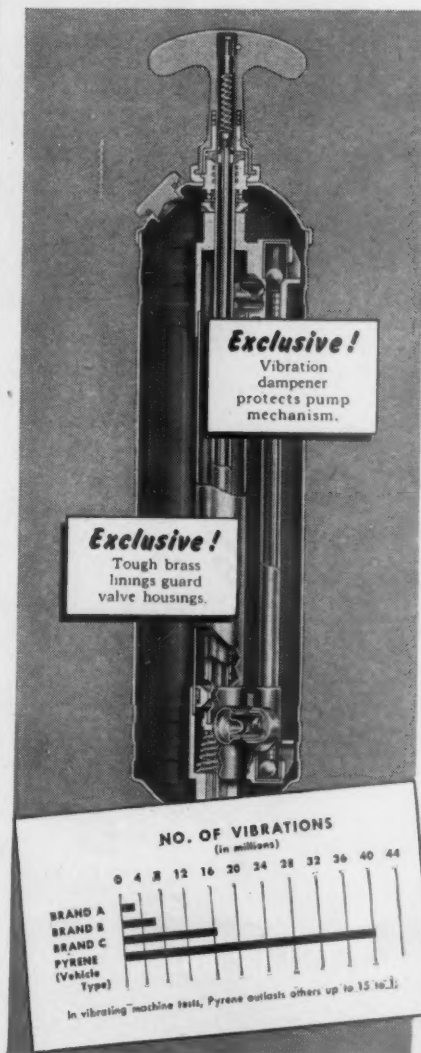
As a result of the elections of **John M. Budd** and **Ira G. Pool** as president and operating vice-president, respectively, of the GREAT NORTHERN—detailed on page 37—**T. A. Jerrow**, superintendent of the Dakota division, at Grand Forks, N. D., has been advanced to general manager, with headquarters at Duluth, Minn., succeeding Mr. Pool. He, in turn, is succeeded by **R. H. Hemmesch**, superintendent of the Klamath division at Klamath Falls, Ore. **C. M. Rasmussen**, trainmaster at Kelly Lake, Minn., succeeds Mr. Hemmesch.

Mitchell J. C. Akers, assistant superintendent terminals of the SOUTHERN at Atlanta, has been advanced to superintendent terminals at Cincinnati. **A. Hayden Exon**, bridge and building supervisor at Somerset, Ky., has been appointed trainmaster at Danville, Ky., and **Charles C. Dowling, Jr.**, yard conductor, has been made terminal trainmaster, with headquarters remaining at Knoxville.

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Vehicle Type Extinguishers



Constant vibration can cut short the life of most vaporizing liquid fire extinguishers.

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TRAFFIC

Malcolm A. Knos, general agent for the GREAT NORTHERN at Buffalo, N. Y., has been transferred in that capacity to Pittsburgh. He is succeeded by **Herbert E. Johnson**, traveling freight agent at Chicago.

J. E. Thames, industrial agent of the NORTHERN PACIFIC, has been advanced to industrial commissioner, with headquarters as before at St. Paul. The duties of industrial commissioner were heretofore performed by **J. H. Poore**, vice-president, execu-

tive department, who had been acting in that capacity in addition to his other responsibilities. **A. L. Anderson**, a member of the N. P.'s industrial department since 1910, succeeds Mr. Thames.

Vernon T. Ross, division freight agent of the SOUTHERN SYSTEM, has been promoted to assistant general freight agent, with headquarters remaining at Macon, Ga., succeeding **A. H. Cooke**, resigned. **James H. Kelley**, commercial agent, has been promoted to district freight agent at Atlanta, Ga., succeeding **Jerry L.**

Townshend, who has been promoted to division freight agent at Macon, to replace Mr. Ross.

Alfred Scheideker, assistant traffic manager of the DULUTH, MISSABE & IRON RANGE, has been promoted to traffic manager, with headquarters remaining at Duluth. Succeeding Mr. Scheideker is **G. C. Carlson**.

John M. Murtaugh has been appointed district passenger agent of the GULF, MOBILE & OHIO at Milwaukee, Wis.

S. C. White, freight traffic representative of the CANADIAN NATIONAL, has been appointed general agent, freight traffic department, CENTRAL VERMONT, with headquarters as before at Montreal.

Leonard G. Henderson, traffic representative for the ST. LOUIS-SAN FRANCISCO at Enid, Okla., has been appointed general agent at Omaha, succeeding **Bruce F. Mahon, Jr.**, who has been transferred to Kansas City, Mo., as announced in the April 30 *Railway Age*.

Robert P. Harrington, general freight agent of the ST. LOUIS SOUTHWESTERN, at St. Louis, will retire on May 31 after 50 years of service with that road. Mr. Harrington began his career as a clerk in the Cotton Belt freight office at Jonesboro, Ark. He served successively as traveling auditor, agent, assistant general freight agent and assistant freight traffic manager until 1929, when he became traffic manager. In 1932 he was appointed general freight agent.

PURCHASES & STORES

N. H. Sands has been appointed division storekeeper of the CHICAGO, BURLINGTON & QUINCY at Centralia, Ill., succeeding **W. W. Waddell**, who has resigned.

Lester H. Finotti, division storekeeper of the SOUTHERN at Asheville, N. C., has been transferred in that capacity to Ludlow, Ky.

OBITUARY

John Reimann, engineer, construction and surveys, of the RICHMOND, FREDERICKSBURG & POTOMAC, at Richmond, Va., died on May 10 after an illness of several weeks.

J. R. Bartholomew, 61, general storekeeper of the ST. LOUIS SOUTHWESTERN at Tyler, Tex., died recently. Mr. Bartholomew entered Cotton Belt service in 1904 as an engine crew caller. He served as engine dispatcher from 1911 to 1920 and subsequently was transferred to the stores department as clerk. He became general storekeeper at Tyler in 1927.

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AGE

LITERATURE and PAMPHLETS Offered by Railway Age Advertisers

Following is a compilation of free literature and pamphlets offered by advertisers in the four May issues of RAILWAY

AGE. Circle the number or numbers on the card below to receive the additional literature you desire.

247. Unicel Freight Car

Pressed Steel Car Company, Inc.—Booklet "Unicel—The Freight Car of The Future—Today" gives the complete story of the Unicel combination box and refrigerator car.

248. Storage Batteries

Gould-National Batteries, Inc.—Booklet on complete Gould Plus-Performance Plan is designed to help conserve battery power.

249. Tractor Equipment

Hyster Company.—Catalogs available on five of the 29 Hyster tractor tools; tractor equipment for (1) construction, (2) industry, (3) oil fields, (4) heavy logging, and (5) light logging. *Please specify when replying.*

250. Freight Car Truck

National Malleable and Steel Castings Company—National C-1 Truck Circular 5150 describes the "Lading-Conscious" Truck.

251. Couplers

The Symington-Gould Corporation—Circular No. 1245 describes the Type "H" Tight-lock Couplers.

252. Wood Preservative

J. H. Baxter & Co.—Free brochure on Chemonite wood preservative for cross-ties, poles, timber and lumber.

253. Vapor-Dried Crossties

Taylor-Colquitt Company—Special report "Norfolk and Western Expects Longer Life from Crossties" describes how Vapor-Drying can prolong crosstie life.

254. Fire-Fighting Foam

Pyrene Manufacturing Company—New Pyrene Air Foam catalog describes air foam equipment for every type of oil fire hazard.

255. Vinylite Passenger Car Flooring

Bakelite Co. Div. of Union Carbide & Carbon Corp.—Complete story available on "Terraflex" flooring made of Vinylite Brand Resins.

256. Fork Lift Truck

Towmotor Corporation—The brochure "The Star of the Show" describes the new series of Towmotor fork lift trucks for 1951.

257. Mobilift Tier-Master

Mobilift Corporation—New bulletins on Mobilift Lev-R-Matic Drive and Tier-Master Stand-Up Model "E".

258. Railroad Finishes

McDougall-Butler Co., Inc.—Literature and a color card describe the company's specialized railroad finishes.

259. One-Man Grain Doors

Signode Steel Strapping Company—Pamphlet 36 by Signode presents the Association of American Railroads' approval of these one-piece, one-man freight car grain doors.

260. Cross-Over Bridges & Ramps

The Wayne Pump Company—Bulletin describes and illustrates the various types of hydraulic platform hoists made by Wayne.

261. Visible Stock-Record System

Electro-Motive Div. General Motors—Full particulars available free on the new Electro-Motive Visible Stock Record System.

262. Douglas Fir Plywood

Douglas Fir Plywood Association—Complete data available on Douglas fir plywood—real wood in large, light, strong panels.

263. Rubber Wire & Cable Insulation

American Steel & Wire Company—Complete test data on any of these compounds: Amarine-40; Amerzone; Amarine RWS; Amerite; Amperox; Amerprene. *Please specify.*

264. Ductile Iron

International Nickel Company, Inc.—A cast ferrous product combining the process advantages of cast iron with many of the product advantages of cast steel. List of publications on availability sources.

265. Purchase Order Control

Remington Rand Inc.—A 4-page summary of Southern Railway's Purchase Order System "before and after" with step by step description of its many economies.

266. Pozzolite Concrete

The Master Builders Co.—Full information and literature on Pozzolite as used in the construction of bridges, tunnels, retaining walls and other types of concrete work.

267. Precast Concrete

Permacrete Products Corp.—Complete descriptive catalog on Permacrete sectional precast concrete railroad products.

268. Rust Preventative

Rust-Oleum Corporation—New catalog describes rust preventative for rolling stock, metal buildings, bridges, signal equipment.

269. Diesel-Electric Locomotive Body Support

Whiting Corporation—Complete specifications on the Whiting "HV" Diesel-electric locomotive body support.

270. Speed Recorders

Barco Manufacturing Co.—New fact-filled catalog presents features of the Barco line of recorders.

271. Insulated Wires and Cables

The Okonite Company—Detailed information on the various specialized Okonite insulated wires and cables.

(Continued first column on reverse side)

Additional Product Information

This is a complete list of products mentioned in the advertisements in this issue. For more data on any product shown, circle the page number on the reply cards below, fill in and mail. Note: If the advertiser mentions more than one product, write in the name of the product you are interested in.

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On page, I want data ononly.
(product)

Name & Title

Company

Address

LITERATURE & PAMPHLETS

- 272. Slack Adjuster**
Westinghouse Air Brake Co.—Descriptive leaflet describes the Westinghouse Type "D" pneumatic automatic slack adjuster.
- 273. Locomotive Stokers**
The Standard Stoker Company, Inc.—Descriptive literature and additional information available on locomotive stokers, automatic spreader type stokers, and Standard-aire blowers. *Please specify.*
- 274. Reels**
Roll-A-Reel Corp.—Details available on the "Roll-A-Reel", for many purposes including wire, rope and cable.
- 275. Dictating Machine**
Thomas A. Edison, Inc.—New descriptive booklet, "Line on Televoice" describes the Televoicewriter—dictating instrument.
- 276. Tie Dowelling Machine**
Graham Tie Dowel Service Co.—Bulletin DM-1 describes tie dowelling machine for applying dowels in one or both tie ends.
- 277. Rust Preventative Coating**
J. W. Mortell Co.—Literature on the Mortex No. 4 rust preventative coating for roofs, interiors and underframes of steel freight and refrigerator cars and hopper cars.
- 278. Step Box**
Railroad Supply and Equipment Inc.—Complete information on the one-piece non-skid passenger car step box.
- 279. G-R-S Automatic Switching**
General Railway Signal Company—Pamphlet #695 describes the one-man complete-control G.R.S. Retarder System with Automatic Switching.
- 280. Industrial Corrugated Aluminum**
Reynolds Metals Company—Literature on methods of application and specifications, plus various uses of Reynolds Lifetime Aluminum Industrial Corrugated.
- 281. Track Raising and Tamping Machine**
Railway Maintenance Corporation—Information available on the operating economy and specifications of HR Track Raising and Tamping Machine.
- 282. Dump Cars**
Differential Steel Car Co.—Bulletin RA-5 describes the Air Dump cars by Differential that dump in two directions.
- 283. Cork Freight Car Insulation**
Dednox Incorporated—Facts on Dednox cork freight car insulation's economy and efficiency in use.
- 284. Circuit Breaker**
Westinghouse Electric Corporation—The shockproof circuit breaker #P-1 described in booklet B-4081.
- 285. Inductive Train Communication**
Union Switch & Signal Company—Full information on "Union" Inductive Train Communication available in Bulletin 160.
- 286. Journal Box Visualizer**
Hyatt Bearings Div. General Motors Corp.—The journal box visualizer shows ease of maintenance of Hyatt journal boxes.

287. Fork Trucks

Clark Equipment Company—Information on Clark attachments and fork-lift trucks in (1) condensed catalog, (2) movie digest, and (3) material handling news. *Please specify.*

288. Passenger Car Paint Specifications

The Sherwin-Williams Company—Complete recommendations covering every phase of passenger car finishing in Sherwin-Williams Painting Specification Guide.

289. Metal Car Parts

Morton Manufacturing Co.—Costs and specification sheets available on steel flooring, hollow metal doors, safety tread, vestibule weather-seal, vestibule curtains and vestibule diaphragms. *Please specify.*

290. Lace-Type Pipe Insulation

Johns-Manville—Folder IN-132A describes Johns-Manville Thermowrap lace-type insulation as used to keep heat inside pipes.

291. Cooling & Generator Equipment

Waukesha Motor Company—Bulletin #1179 gives data on the Waukesha mobile engine-driven refrigeration and generator equipment.

292. Automatic End Door Operators

National Pneumatic Co., Inc.—Publication #1063 gives full information on NP automatic end-door operators.

293. Refrigerator Car Insulation

American Hair & Felt Co.—Complete data on Streamlite Hairinsul all-hair refrigerator car insulation.

294. Locomotive Cranes

American Hoist & Derrick Co.—Literature on American's Diesel and DiesElectric locomotive cranes.

295. Chilled Car Wheels

Association of Manufacturers of Chilled Car Wheels—Descriptive booklet "Gentlemen of the Jury" gives data on AMCCW chilled car wheels.

296. Swinging Boom Cranes

Silent Hoist & Crane Co.—Bulletin #79 illustrates the job possibilities of the Krane Kar swinging boom railroad crane.

297. Solid Journal Bearings

Magnus Metal Corporation subs. of National Lead Co.—Booklet "Facts" gives information regarding the A.A.R. solid journal bearings.

298. Electric Typewriters

Remington Rand—Folder RE8354 completely describes the new Remington Economy Typewriter

299. Steel

Bethlehem Steel Co.—Catalog No. 259 describes Bethlehem's Mayari R low-alloy, high strength steel.

300. Vibration Controls

Lord Manufacturing Co.—Two items of special interest to designers and engineers: National Frequency Chart and Vibration Isolation Chart.

301. Car Heating Control System

Minneapolis Honeywell—Complete facts in two booklets; *please specify.* Weatherstat Control and Economy Car-Heating Systems.

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On page, I want data ononly.
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Company

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BOOKS

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and Production
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for steam railroads,
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in traffic of
agencies can be
the private passenger
ly owned trucking
of growth, passenger
traffic reached
World War II
have kept passenger
and commodity
per worker in the
rose even more
turing. To this
ments contribute
diesel locomotive
tation by water.
Special attention
problems of construction
field. An appendix
problem of measurement
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*Toll Roads and
Modernization,
Charles L. Dear
ings Institution,
Washington 6, D.C.*

The toll road
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of highway administration
cope with increasing
vehicle traffic. This
is to analyze the
stages of the toll road
defects in state
have led to its
changes in public
store the effectiveness
ment. Since the obstacles
are formidable,
that the toll solution
sibility of realizing
of modern highways.
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toll finance may
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Current Publications

BOOKS

The Transportation Industries, 1889-1946; A Study of Output, Employment, and Productivity, by Harold Barger. 288 pages, tables, charts. Published by the National Bureau of Economic Research, Inc., 1819 Broadway, New York 23. \$4.

This volume offers new indices of output, employment, and output per worker for steam railways, electric railways, oil pipelines, waterways, and airlines; and for transportation as a whole. Figures for passenger-miles and ton-miles in water transportation, here given for the first time, fill a notable gap in measures of the physical performance of American economy. The analysis shows that retardation of growth in traffic of commercial transportation agencies can be largely accounted for by the private passenger car and the privately owned truck. Despite such retardation of growth, passenger travel and freight traffic reached an all-time peak during World War II. Over half a century they have kept pace with population growth and commodity output. Moreover, output per worker in the transportation industries rose even more rapidly than in manufacturing. To this result such striking developments contributed as the multiple-unit diesel locomotive and the bulk transportation by water of iron ore and petroleum. Special attention is given to the technical problems of constructing indices in this field. An appendix treats the theoretical problem of measuring the physical output of public utilities.

Toll Roads and the Problem of Highway Modernization, by Wilfred Owen and Charles L. Dearing. 204 pages. The Brookings Institution, 722 Jackson pl., N. W., Washington 6, D. C. \$2.50.

The toll road movement has focused attention on the inability of current methods of highway administration and finance to cope with increasing demands of motor vehicle traffic. The purpose of this book is to analyze the advantages and disadvantages of the toll road, to indicate the basic defects in state and federal policy which have led to its revival, and to suggest changes in public policy necessary to restore the effectiveness of highway management. Since the obstacles to policy reform are formidable, some states have found that the toll solution offers the only possibility of realizing promptly the benefits of modern highway transportation. Consequently, this study indicates ways in which toll finance may be integrated with conventional financial and administrative measures.

PERIODICAL ARTICLES

Annual Speed Survey, by Donald M. Steffee. *Railroad Magazine*, April 1951, pp. 18-49. Popular Publications, 205 E. 42nd st., New York 17. Single copies, 35 cents.

This, the 15th annual speed survey, brings up to date statistics on the fastest

regularly scheduled start-to-stop runs on United States and Canadian railroads. The runs covered are those timed at 60 m.p.h. or better, except as noted, and are divided to show diesel, steam and electric operation. One summary table shows, for each railroad, the total mileage operated at 60, 65, 70, and 75 m.p.h. or over, by each type of motive power, and another shows total mileage made by each type of power. The text which accompanies Mr. Steffee's statistics comments on notable changes made on specific runs and on the introduction of the Budd RD cars.

Keeping Track of Freight Cars. Business Week, April 21, 1951, pp. 70-78. McGraw-

Hill Publishing Company, 330 W. 42nd st., New York 18. Single copies, 25 cents.

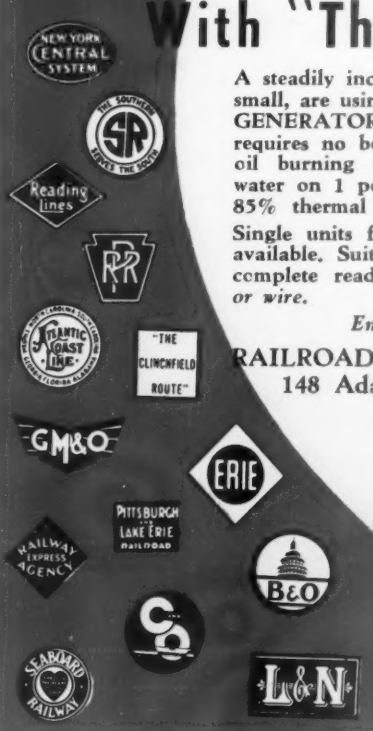
Keeping track of a carload of freight from origination to destination is a complicated business which is outlined in this article, as is the method used in counting the cars of revenue freight loaded each week. These figures form the basis of the reports issued by the Association of American Railroads.

The Foreman's Digest. Vol. 1, No. 1, May 1951. The Foreman's Digest, 18 South Dean st., Englewood, N. J. \$6 a year. Single copies, 50 cents.

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articles from such representative publications as *United Nations World*, *Business Week*, *American Business*, *Industry and Power*, *Steelways*, *Wall Street Journal*, *Factory*, and *Harvard Business Review*. In an accompanying letter, Mort Friedlander, the editor, says "Perhaps some of the sources from which the contents have been chosen will surprise you. Rare, indeed, is the foreman who will be found reading the *Harvard Business Review*, or the *Wall Street Journal* or *United Nations World*. True, these periodicals don't often carry articles for the average foreman. However, in the course of the year almost all of them do contain features you would be

glad to have brought to your foremen's attention. . . Selecting just such articles—and condensing and editing them for easy, quick reading—is the job of the Foreman's Digest staff."

Federal Railroad Equipment Legislation, by DeForest Billyou. *Harvard Law Review*, February 1951, pp. 608-615. *Harvard Law Review Association*, Cambridge 38, Mass. Single copies, \$1. Reprinted in *I. C. C. Practitioners' Journal*, March 1951, pp. 481-486. *Association of Interstate Commerce Commission Practitioners*, 2218 I. C. C. bldg., Washington, D. C. Single copies, \$1. Mr. Billyou outlines briefly the Phila-

delphia Plan equipment trust, why it developed, and why it has continued to be an attractive form of equipment financing. He then notes the bewildering aggregation of state statutory requirements and suggests that the only solution to these numerous requirements is a federal railroad equipment statute. "Enactment of such a statute," he says, "seems desirable to quiet concern as to details of present practice, to obviate the appreciable expenditure of time and effort made necessary by present diverse state laws, and to eliminate the burden of cumulative recording fees and taxes. Such a statute should appeal to railroads, investors in railroad securities and their counsel. And the desire of the I. C. C. to maintain the integrity of railroad equipment securities indicates that it would be receptive to enactment of such a statute."

TRADE PUBLICATIONS

Standard Fixtures for Railway Post Office. 16 pages, indexed. *American Car & Foundry Co.*, 30 Church st., New York 7.

This booklet gives the Post Office Department specifications of fixtures for mail cars and illustrates in detail the fittings required for new car construction or for the rebuilding and repairing of existing equipment. Items carry catalog numbers for use in ordering.

A Policy Decision in Railway Weed Control. General Chemical Division, *Allied Chemical & Dye Corp.*, 40 Rector st., New York 6.

Discusses a program of weed control offered by General Chemical, which aims at eradication of persistent perennial root systems, with diminishing annual expenditures, for this purpose. Included are color photographs showing cumulative results obtained from multiple treatments on various railroads.

General Chemical Weed Killers for Improved Control of Railway Weeds. 8 pages, illustrations. General Chemical Division, *Allied Chemical & Dye Corp.*, 40 Rector st., New York 6.

Describes characteristics and applications of General Chemical formulations for cumulative control of railway weeds; gives data regarding the company's weed-control spray service; and presents charts showing methods of treating various track areas.

PAMPHLET

Seeds of Victory. 47 pages. *Caterpillar Tractor Company*, Peoria 8, Ill. Free.

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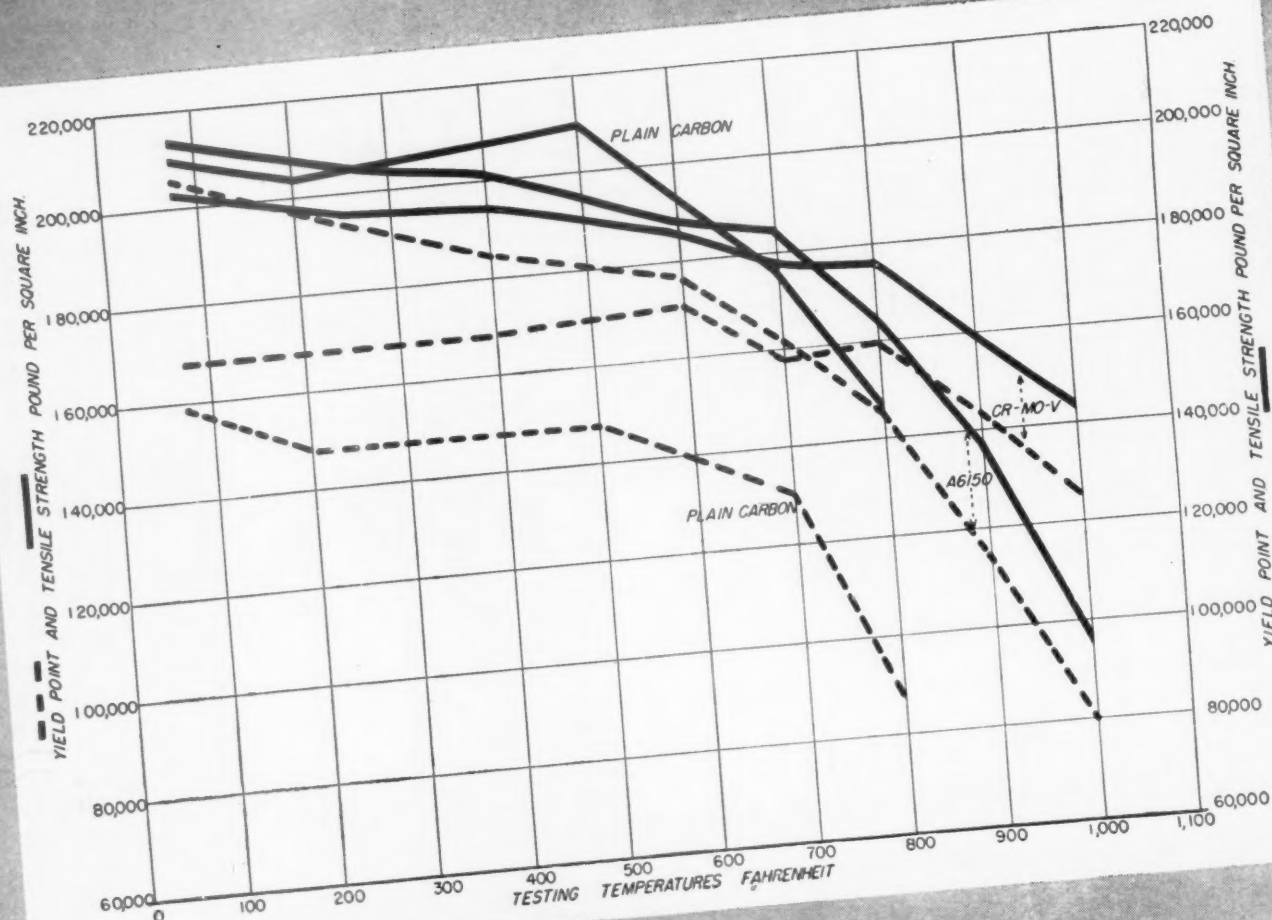
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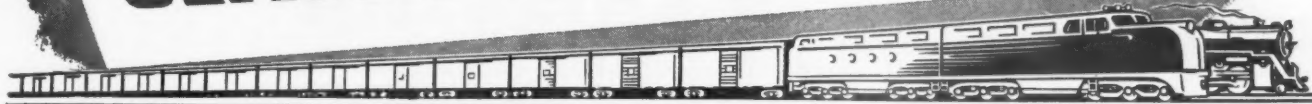


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